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Source Separation - the Community Awareness Program in Somerville and Marblehead, Massachusetts

Resource Planning Associates, Cambridge, Mass

Prepared for

Environmental Protection Agency, Washington, D C Office of Solid Waste Management Programs

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NOVEMBER 1976

source separation

the community awareness program in Somerville and Marblehead, Massachusetts

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SOURCE SEPARATION

The Community Awareness Program

in Somerville and Marblehead, Massachusetts

This report (SW-551) describes the work carried out
under demonstration grants no. S803683-01 and S803758-01.

U.S. ENVIRONMENTAL PROTECTION AGENCY

1976

This report was prepared by Resource Planning Associates, Inc., Cambridge, Massachusetts, as part of the work done under demonstration grants no. S803683-01 and S803758-01.

FOREWORD

In accordance with the authority granted under section 204 of the Resource Recovery Act, the U. S. Environmental Protection Agency (EPA) conducted studies to determine the feasibility of multimaterial source separation in the communities of Somerville and Marblehead, Massachusetts. As a consequence of the promising results yielded by these studies, the two municipalities were awarded demonstration grants (nos. S803683-01 and S803758-01 for Somerville and Marblehead, respectively) to fund the implementation and documentation of this resource recovery approach. These funds were granted on the premise that information on this method of resource recovery would be of value and use to other municipalities throughout the nation.

This study of the community awareness program in Somerville and Marblehead, Massachusetts, marks the completion of the first phase of the documentation process required under the grants. I would like to acknowledge the work of Resource Planning Associates, Inc., in preparing this report for the two communities. In particular, I would like to thank the public education coordinators John Madama, David Grebow and Joelle Brown in Somerville, and JoAnne Rowe and Mickey Clement in Marblehead for their assistance in the preparation of this report. In addition, I would like to thank Penelope Hansen, Resource Recovery Specialist of EPA for her work as project officer overseeing the implementation and development of the two programs.

Sheldon Meyers
Deputy Assistant Administrator
for Solid Waste Management Programs

CONTENTS

		Page
1.	BACKGROUND OF THE COMMUNITY AWARENESS PROGRAM	1
	Program Objectives and Major Elements	1
	The Communities	2
2.	PLANNING, IMPLEMENTATION, AND EVALUATION OF THE COMMUNITY AWARENESS PROGRAM	5
	A. Initiating the Programs	5
	Program Goals	5
	Program Staffing	6
	Components of the Programs	6
	B. The Media Component	7
	Recycling Program Logotype (Logo)	10
	Newspapers	16
	Community Letter	30
	Radio	37
	Cable Television	38
	Commercial and Public Broadcasting Service Television	39
	Posters	40
	Graphic Display	42
	Stickers	44
	Calendar	46
	C. The Schools Component	52
	Somerville Schools Program	52
	Marblehead Schools Program	55
	D. The Community Groups Component	57
	Somerville Community Groups Program	57
	Marblehead Community Groups Program	61
	E. Other Community Awareness Activities	67
	Recycling Crew Workshop	67
	Community "Hot Line"	67

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CONTENTS
(Continued)

		Page
F.	Status of Materials Recovery and Community Awareness Program Costs	68
	Status of Materials Recovery	68
	Community Awareness Program Costs	68
3.	GUIDELINES FOR A COMMUNITY AWARENESS PROGRAM	71
A.	General Guidelines	71
	Scheduling	71
	Local Participation	71
	Clarification of Roles	71
	Planning the Program	72
	Commercial Support	72
B.	Specific Program Components	73
	Media	73
	Recycling Program Logotype and Title	73
	Newspapers	74
	Community Letter	75
	Radio and Cable Television	76
	Commercial Television	76
	Posters	77
	Graphic Displays	77
	Stickers	78
	Calendar	79
	Schools	80
	Community Groups	81
	Other Activities	81

Exhibits

1-1	Key Characteristics of Communities	3
2-1	Community Awareness Program Schedule - Somerville	8
2-2	Community Awareness Program Schedule - Marblehead	9

CONTENTS
(Continued)

		Page
	Exhibits (Continued)	
2-3	Somerville Recycling Program Logotype	11
2-4	Somerville Program - Cartoon Characters	13
2-5	Marblehead Recycling Program Logotype	14
2-6	Other Entries for Marblehead Logotype Contest	15
2-7	SOMERVILLE SAVES Start-Up Article	18
2-8	SOMERVILLE SAVES Participant Instructions	19
2-9	SOMERVILLE SAVES Article - Program Success	20
2-10	SOMERVILLE SAVES Article - Program Success	21
2-11	SOMERVILLE SAVES Article - Problem Areas	22
2-12	SOMERVILLE SAVES Editorial	23
2-13	SOMERVILLE SAVES Advertisement	24
2-14	RECYCLE-PLUS Article - Cost Issue	26
2-15	RECYCLE-PLUS Special Interest Article	28
2-16	RECYCLE-PLUS Editorial	29
2-17	SOMERVILLE SAVES Community Letter	31-32
2-18	SOMERVILLE SAVES Community Letter Envelope	33
2-19	RECYCLE-PLUS Community Letter	36
2-20	SOMERVILLE SAVES Poster	41
2-21	RECYCLE-PLUS Poster	43
2-22	SOMERVILLE SAVES Sticker	45
2-23	SOMERVILLE SAVES Calendar	47-48

CONTENTS
(Continued)

Page

Exhibits
(Continued)

2-24 SOMERVILLE SAVES Schools Program Teaching Materials - Sample 54

2-25 RECYCLE-PLUS Schools Program Flyer 56

2-26 SOMERVILLE SAVES Organization Leader Brochure 59-60

2-27 SOMERVILLE SAVES General Organizational Handout 62-63

2-28 RECYCLE-PLUS Church Group Letter 65

2-29 RECYCLE-PLUS Church Bulletin 66

2-30 Recycled Materials Recovery in Somerville and Marblehead 69

1. BACKGROUND OF THE COMMUNITY AWARENESS PROGRAM

The U.S. Environmental Protection Agency (EPA) conducted studies to determine the technical and economic feasibility of multimaterial source separation.* Two Massachusetts communities were selected for these studies; Somerville, an urban community of 90,000, and Marblehead, a suburb of Boston with 23,000 residents. The major findings of these studies are:

- Materials that can be readily recycled by the homeowner comprise over 30 percent of the solid waste stream by weight
- At reasonable levels of participation, the revenues and disposal cost savings from source separation would exceed the costs of separately collecting these materials, thereby reducing the communities' solid waste management costs
- Surveys conducted in both communities revealed that the citizens were aware of recycling and its benefits and were willing to participate in a recycling program if it were relatively convenient to do so and if it promised an economic return to the community.

As a result of these promising studies, EPA awarded grants to each community to demonstrate source separation for a three-year period. EPA funded these programs in order to demonstrate and document approaches to recycling that would be of interest and value to a range of municipalities across the United States.

PROGRAM OBJECTIVES AND MAJOR ELEMENTS

The source-separation programs in the two selected communities are designed to achieve an optimum balance between materials recovery and economic return to the communities, by:

- Minimizing collection costs

---

* Source separation, one of several approaches to resource recovery, involves the separation of solid waste by the homeowner into recyclable components (paper, glass, cans) and non-recyclable components. The recyclables are then collected and sold for reuse.

- Establishing a favorable long-term market for recovered materials

- Maximizing the participation rate.

Collection costs are being minimized by using special recycling trucks, collectors from the available labor pool, and efficient collection routes.

Favorable markets for materials were obtained: (1) by seeking competitive bids on contracts with a floor-price* provision; (2) by assuring the successful bidder of a stable supply of all recyclables from the community; and (3) by guaranteeing that the materials would be delivered in a form that could be readily processed into a valuable, marketable commodity.

Maximizing participation involved two steps. First, the program was designed to minimize inconvenience to the participating residents by offering weekly collection and by establishing simple, easily remembered separation and collection procedures, e.g., combining glass and metal cans in one container, eliminating cleaning or other preparation of materials, and scheduling collection of recyclables on the same day as the regular mixed-refuse pickup. Secondly, intensive community awareness campaigns were planned and implemented in both communities to generate and maintain interest in recycling. The campaigns were designed to make recycling a habit for all residents of the community.

THE COMMUNITIES

The two communities represent opposite ends of the municipal spectrum (see Exhibit 1-1).

Somerville

Somerville is an urban community with a population of 90,000 and a population density of 27,000 persons per square mile, one of the highest in the nation. The city, which is in the Boston metropolitan area, is governed by a mayor, who was reelected to his fourth consecutive term in November 1975, and a board of aldermen. Single-family homes house 10 percent of the families in Somerville, while most of the remaining population lives in two-, three-, and four-family homes. Sixty-five percent of the families rent their homes or apartments, while 35 percent live in their own home. The median income is $9,600 per year, and the median education level 11.6 years. Somerville has a strong, aggressive municipal employees union. Prior to the EPA grant, Somerville had never had a recycling program.

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* A floor price is a guaranteed minimum price that the buyer must pay to the community regardless of fluctuations in the market price.

Exhibit 1–1

KEY CHARACTERISTICS OF COMMUNITIES

	Somerville	Marblehead
Population	90,000	23,000
Land area (sq. mi.)	4	4.5
Population density (persons/sq. mi.)	22,600	5,200
Housing: Single-family	10%	70%
Multi-family	90%	30%
Median income (per year)	$9,600	$12,600
Median education (years)	11.6	13.2

Marblehead

Marblehead is an affluent suburban community, also within the Boston metropolitan area, with a population of 23,000 and a population density of 5.200 persons per square mile. The town is governed by a board of selectmen, with a nearly autonomous board of health in charge of all public health matters, including refuse collection and disposal. Seventy percent of the families live in single-family homes. Fifteen percent of the families rent their homes or apartments, while 85 percent own their residences. The median income is $12,600 per year, and the median education level 13.2 years. The municipal employees are unionized. The town had a relatively successful municipally operated, multimaterial, curbside source-separation program for several years prior to the start of the new program, although with less frequent pickups than the new program.

* * *

Under the conditions of the grants from EPA, Somerville and Marblehead are to implement the program and to provide documentation to EPA at periodic intervals. EPA will use these reports in an information transfer program to provide other interested communities with complete information for establishing similar programs.

This report represents the first phase of the documentation process, and, by mutual agreement between EPA and the communtiies, is focused on the community awareness programs that were planned and implemented for each community. Chapter 2 is a detailed description of the planning and implementation of the community awareness programs in the two target communities, with evaluations of each phase of the programs. Chapter 3 provides a concise, general guide to planning and implementing such programs for other communities, based on the practical experience gained in Somerville and Marblehead.

This report was prepared by Resource Planning Associates, Inc. (RPA), program planning consultants to both communities. Assisting RPA in the preparation of the report were the community awareness coordinators (subcontractors to RPA): Steppingstones, Inc. in Somerville and Mickey Clement and JoAnn Rowe in Marblehead.

2. PLANNING, IMPLEMENTATION, AND EVALUATION OF COMMUNITY AWARENESS PROGRAMS

A. INITIATING THE PROGRAMS

In this chapter, we describe the broad objectives and approaches to community awareness for the recycling programs in Somerville and Marblehead. Detailed documentation and evaluation of each phase of the programs is provided in the following sections. The chapter concludes with a discussion of material quantities recovered to date and community awareness program costs and manpower requirements for each community.

PROGRAM GOALS

The overall objective of the community awareness program was to maximize citizen participation. To achieve this objective, the programs were developed with the following major goals:

- To create citizen awareness of the benefits of recycling to their community, their environment, and their country, with a focus on:
  - The importance of conserving scarce resources, including both materials and energy
  - The economic benefits of recycling to the community
  - The environmental benefits of recycling to the community, such as reduction of litter and of air and water pollution.
- To instruct the citizens on how they would participate actively in the program by providing detailed information on:
  - In-home recycling procedures (level of separation)
  - Collection schedule (day of collection and frequency)
  - Procedures for placement at the curb.
- To maintain citizen interest in the program and to make recycling a habit by reporting program results, benefits, and progress.

PROGRAM STAFFING

To achieve these goals, we established a team of community awareness coordinators in each community before detailed planning and implementation of the program. In both Somerville and Marblehead, it was decided that program staff should include some representation from within the community. In Somerville, community awareness was coordinated by Steppingstones, Inc., an environmental education firm located in Somerville. Of the three team members, one is a Somerville resident and two live in neighboring Cambridge. The group has substantial previous experience in community work, environmental education, and media design. The staff in Marblehead consisted of JoAnne Rowe and Mickey Clement, both of whom live in the town and have been active in community affairs for several years.

COMPONENTS OF THE PROGRAMS

The specific means of accomplishing the program goals in both communities involves an integrated communications approach with three major components:

- Media
- Schools
- Community Groups

Through these three elements, all citizens could be reached in a number of ways and with a number of different images, all of which would reinforce the concept of, and need for, recycling.

The major steps in planning and implementing the awareness programs were:

1. Establishing a starting date when collection would begin. This required close coordination with various officials and community groups. The grants were awarded in June 1975, and the initial starting date for both programs was set for September 1975. Delays in truck acquisition and other problems caused postponement to December 1, 1975, for Somerville and January 12, 1976, for Marblehead.
2. Deciding on the specific elements of each of the three major program components.
3. Establishing the timing of each element to coordinate, primarily, with the recycling program start-up date.

4. Developing a detailed plan and design for each element, including graphics, printing requirements, and distribution needs.

5. Implementing the planned activity, including final design, printing, press releases, distribution of calendars, mailing of letters, etc.

The interrelationships of the various elements of the awareness program are extremely complex. Some indication of the degree of integration required will become apparent in the detailed description of the program elements in the following sections of this chapter. Exhibits 2-1 and 2-2 provide a schedule of community awareness activities in each of the communities. These schedules are a useful overview of the timing of the various elements of the program.

The following discussion of the program elements includes a detailed description of each and an evaluation based on both the Somerville and Marblehead experiences. The evaluation cannot be considered comprehensive or complete at this time, since the programs are barely underway. The real success of the programs will be reflected only in longer-term program results and will be addressed in later reports. The evaluations presented here are the result of citizen feedback received to date and the collective opinions, in retrospect, of the community awareness teams as to effectiveness or shortcomings of the various elements of the programs.

B. THE MEDIA COMPONENT

The media component involves a number of specific communication vehicles, including:

- Recycling program logotype
- Newspapers
- Community letter
- Radio
- Cable television
- Commercial and Public Broadcasting Service television
- Posters

COMMUNITY AWARENESS PROGRAM SCHEDULE–SOMERVILLE

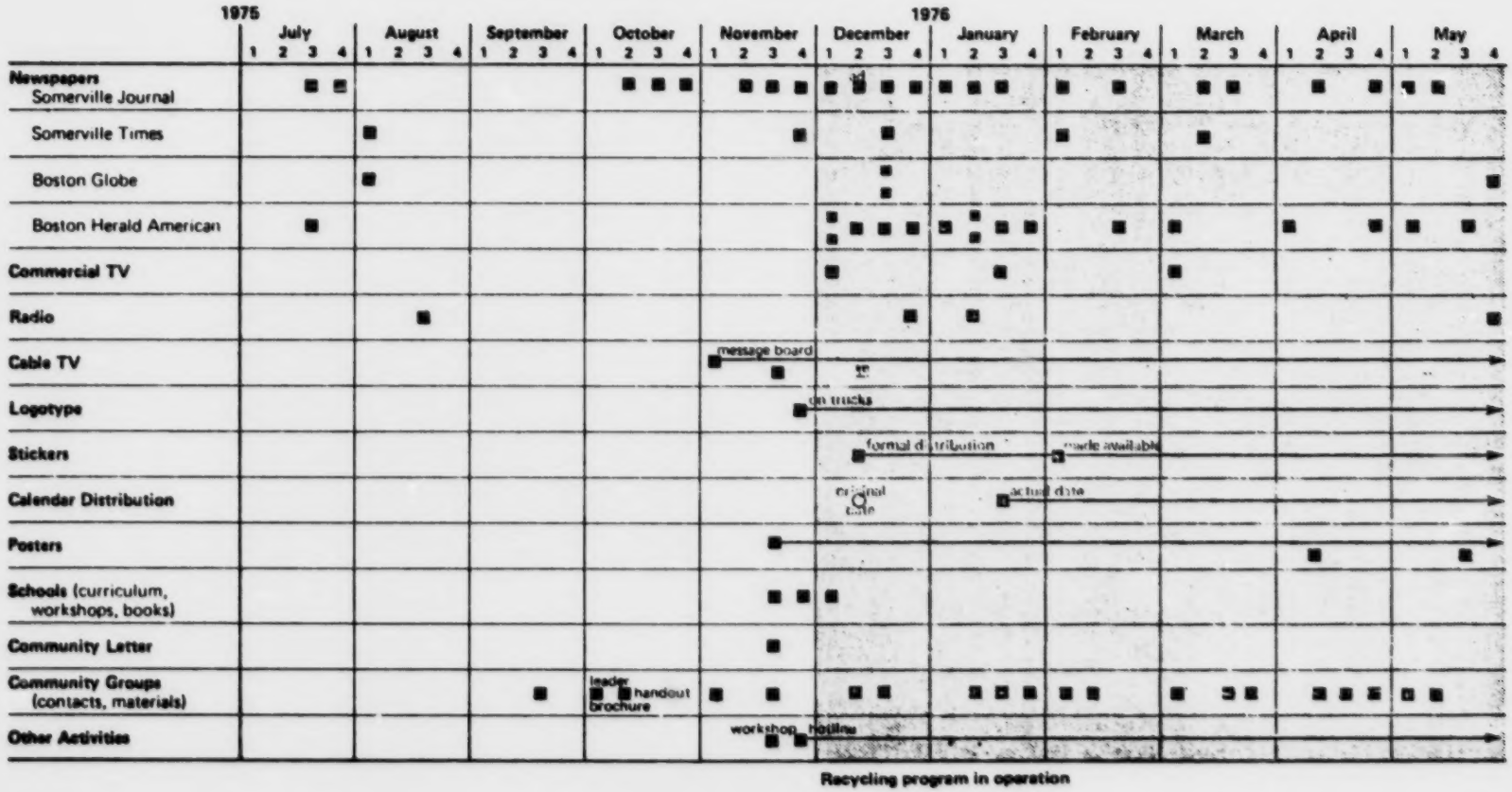


Exhibit 2–1

COMMUNITY AWARENESS PROGRAM SCHEDULE–MARBLEHEAD

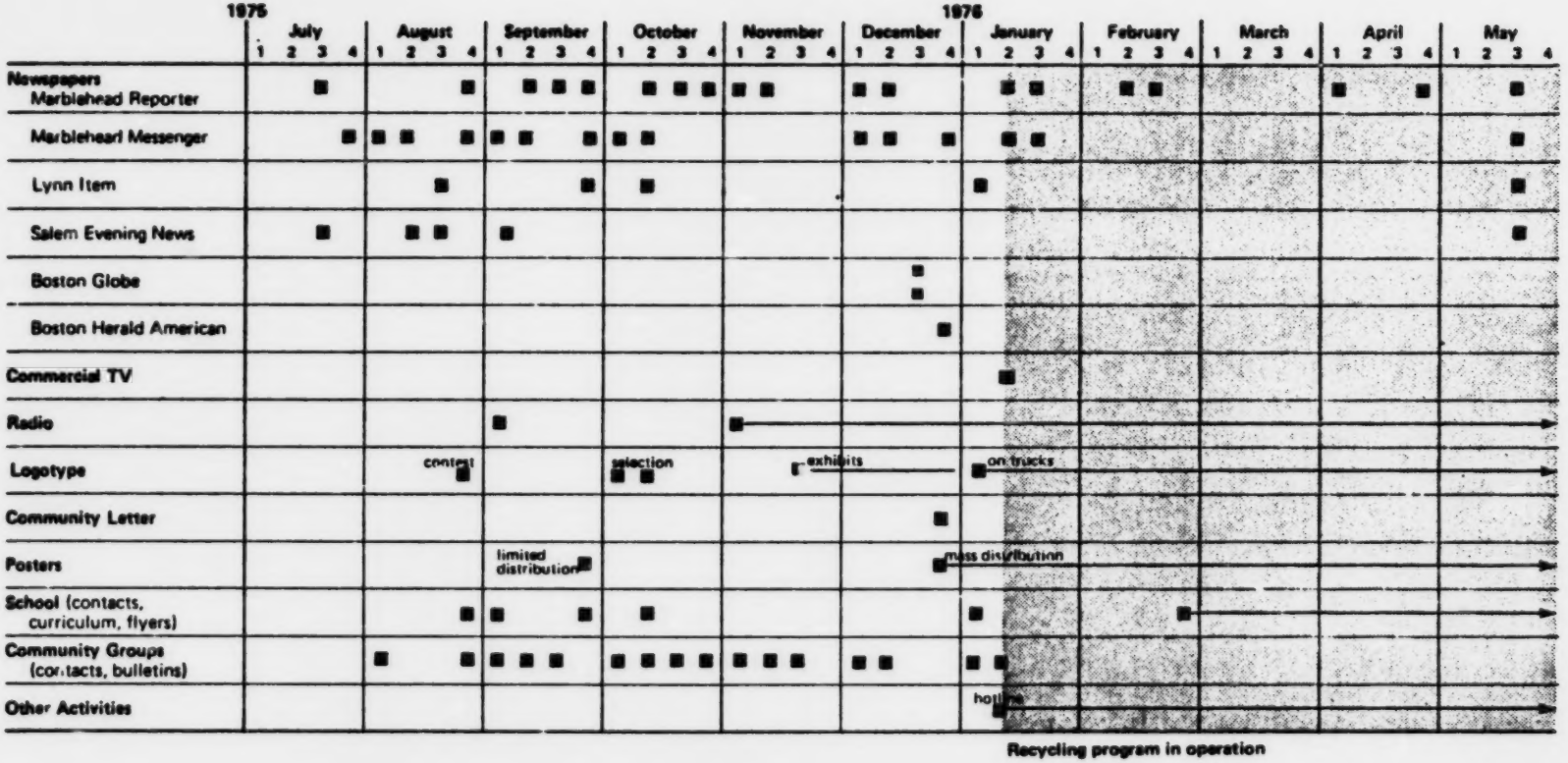


Exhibit 2–2

- Graphic display
- Stickers
- Calendar

We chose many different approaches in order to be certain that each individual in the community was reached at least once. Each of these media elements is discussed and evaluated in detail below.

RECYCLING PROGRAM LOGOTYPE (LOGO)

A logo and identifying title were developed for both the Somerville and Marblehead recycling programs to make the programs more readily identifiable to the citizen and to establish the uniqueness of each. It was decided at an early stage in both programs to paint the logos on the recycling trucks to achieve the maximum visual impact.

Somerville

The logo and program title were developed by the program team, assisted by professional graphic artists. Residents were requested, through newspaper articles, to submit suggestions for the program name in July and August 1975. These suggestions were added to a list of titles developed by the program staff. Following discussions with city officials and EPA representatives, the title SOMERVILLE SAVES was selected and a logo chosen (see Exhibit 2-3). The name of the program encompasses all of the major objectives of the program and is easily remembered (Somerville saves glass and cans and paper; Somerville saves money for the city and for improved city services; Somerville saves valuable energy and limited natural resources; Somerville saves by reducing the pollution of the air and water and land).

Other names considered include: TREE-CYCLES, SOMER-CYCLES, PROJECT SORT (Separation of Recyclable Trash), SCRAP (Somerville Cooperative Recycling Approach Program).

The logo features three arrows in a recycling pattern, one each for the glass, cans, and paper to be recycled. An orange logo on a yellow background was chosen as an appealing and distinctive color combination.

Local artists, employed by the city to paint murals in public buildings, painted the logo and name on both sides of the two recycling trucks, and the bodies of the trucks were painted a bright yellow to differentiate them from the regular orange refuse vehicles. Four additional signs were painted to be attached to other refuse trucks in the event they had to be used to collect recyclables.

Exhibit 2–3
Somerville Recycling Program Logotype

In addition to the formal program logo and title, three cartoon characters were developed to represent each of the recyclable components (see Exhibit 2-4). These characters were used in newspapers, community handouts, and posters, and in the school program.

Marblehead

Marblehead took a different approach to the selection of a program name and logo. At a meeting of the Marblehead Board of Health in September, the program teams presented several alternative ideas for names, with a recommendation that MARBLEHEAD MULTI-CYCLE be chosen. The Board of Health eventually developed and adopted the name RECYCLE PLUS to connote both the recycling of more than one material and the fact that this program is an extension of their previous multimaterial recycling program.

Following the selection of a name, the Board of Health sponsored a logo contest, in which the residents were requested to submit their ideas for a logo that coordinated with the program name and objectives and that would be appropriate for display on a collection vehicle. The winner of the logo contest was to receive a 10-speed bicycle reconstructed by a member of the board from parts found at the town landfill.

Thirty-one contest entries were received, including several from professional artists who live in the town and one from an elementary school class. The winning entry is shown in Exhibit 2-5. Other logo design entries are shown in Exhibit 2-6.

The logo was painted on both recycling trucks by the firm who furnished and painted the truck bodies. The logo is in green and orange on a white background.

All logo entries were exhibited in the town hall and the public library throughout November and December 1975.

Evaluation

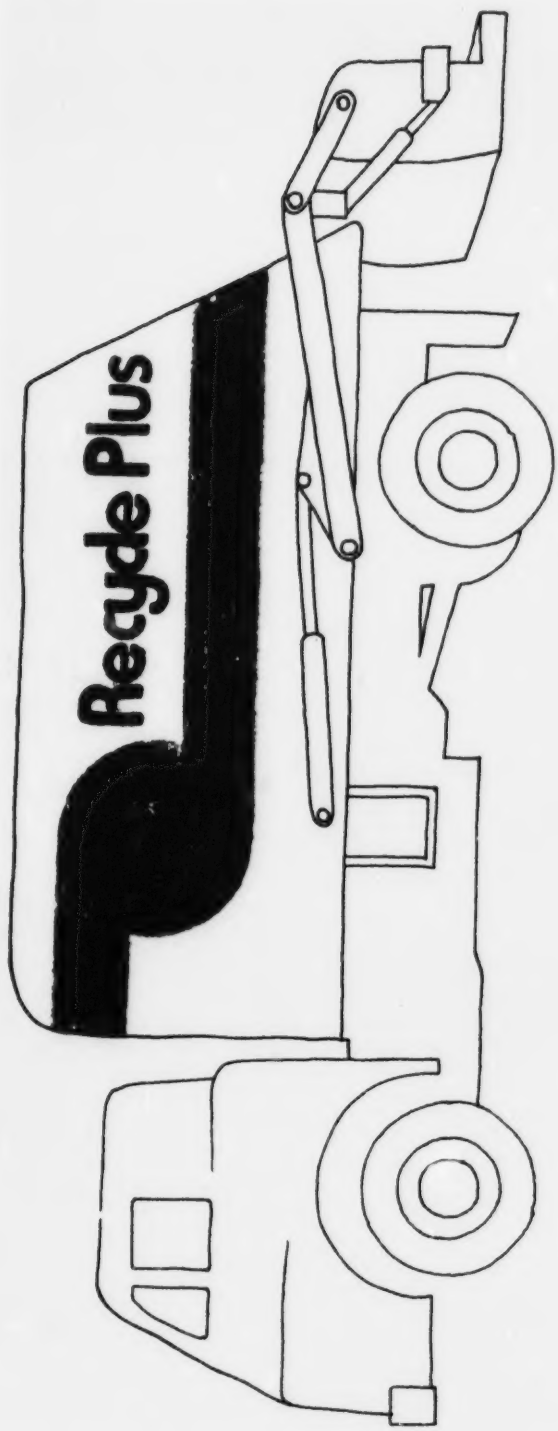
The use of a unique logo and name, particularly when highly visible to the residents on a continuing basis (i.e., painted on the collection vehicles), is an effective and inexpensive communication tool. A number of residents in both Somerville and Marblehead have commented very favorably on the visual appeal of the design. In addition, the recyclable collectors have taken a sense of pride in their special trucks.

The encouragement of public participation in the logo/name design process is an effective way of getting the public involved in the program. The more formal contest approach chosen in Marblehead was particularly effective.

Exhibit 2–4
Somerville Program—Cartoon Characters

SOMERVILLE SAVES
- get ready to sort out your:

Exhibit 2–5



Marblehead Recycling Program Logotype

Exhibit 2–6
Other Entries for Marblehead Logotype Contest

NEWSPAPERS

Coverage in both local and regional newspapers is an important part of the awareness program, since it offers one of the best opportunities to reach a majority of the citizens at planned intervals. Both Marblehead and Somerville have community newspapers that are published weekly or monthly and distributed to most residents. The Boston Globe and Boston Herald-American are major regional newspapers serving the greater Boston area and a significant portion of New England. Program coverage through these newspapers has been extensive and has included news articles, editorials, letters to the editor, and advertisements. Items covered in the newspapers include:

- General information related to recycling, e.g., energy conservation
- Instructions to participants
- Program achievements, e.g., weights, revenues
- Problem areas, e.g., scavengers, operational delays due to weather
- Feature articles.

Somerville

The Somerville program was covered by the following newspapers:

- Somerville Journal (published weekly; circulation 12,000)
- Somerville Times (published monthly; delivered free to each Somerville household)
- Boston Herald-American (published daily, with a regular "Somerville Stroller" section; Somerville circulation 8,358)
- Boston Globe (published daily; Somerville circulation 10,485).

Limited coverage was provided by the Tufts University Paper and EPA News (EPA Region 1 publication).

Initially, personal contacts were made with the reporting and editorial staffs of the local and regional newspapers. The purpose of these meetings, and the continuing contacts that followed throughout the early months of the program, was to inform the press about

the objectives, the expected benefits to the community, and the uniqueness of the program. It was hoped that the enthusiasm of the program team could be transmitted to the press, thereby maximizing the possibilities for press coverage.

The format and content of the news items were varied according to requirements of the program. News articles with photographs were developed and distributed to the press, usually through official press releases from the city's Public Information Office, with personal follow-up provided by members of the program team. The news articles (which numbered 57 through mid-May 1976, ranging in length from a few lines to one-third of a page) covered a wide range of topics:

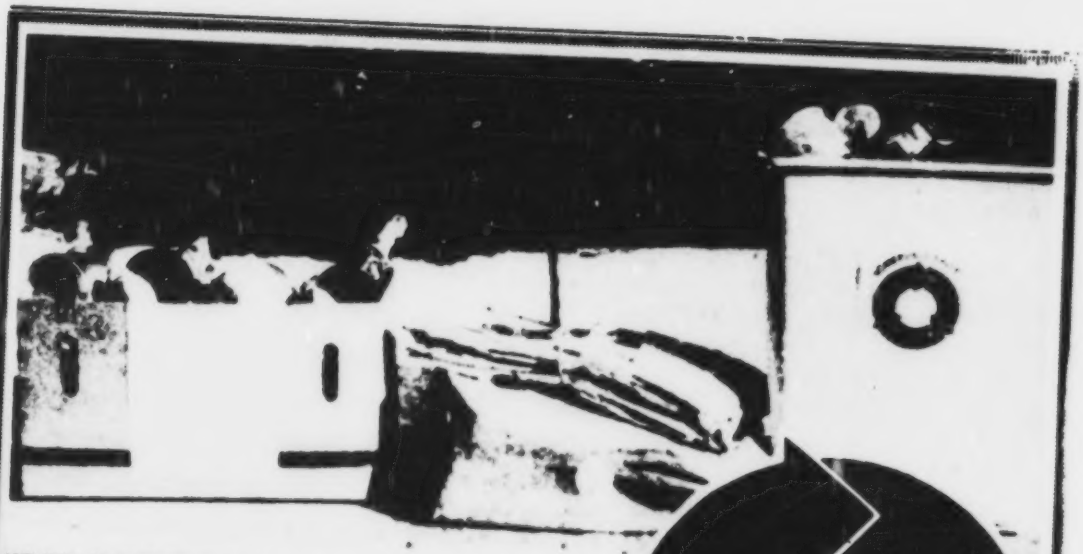
- Major program events, such as the EPA grant presentation, program start-up, and city-wide calendar distribution (see Exhibit 2-7)
- Instruction to citizens on when and how to recycle (see Exhibit 2-8)
- Program success, measured in material tonnages collected and dollar savings (see Exhibits 2-9 and 2-10)
- Problem areas, such as scavengers operating delays due to snowstorms (see Exhibit 2-11)
- Feature articles, on such subjects as how recycling conserves energy or the flow of recyclables from the home of the manufacturing plant, or the environmental benefits of recycling.

In addition to news articles, limited use was made of editorials and advertisements. The Somerville Journal had two editorials on the program shortly before start-up; both encouraged residents to participate in the program (see Exhibit 2-12).

One advertisement was taken in the Somerville Journal (Exhibit 2-13). The purpose of the advertisement was to advise the residents of the success of the program to date and to thank them for their cooperation. The advertising format was chosen both because if offered a more flexible format than a news articles and because of the positive impact of buying advertising space on press relations with the Journal.

During the four-month period from the start of the planning phase until about six weeks before recycling program start-up, the newspapers were somewhat reserved in their enthusiasm for news items about the program, due to the uncertainty surrounding the program starting date and the delivery of the new trucks. Until they knew for sure when the program would begin, they offered rather limited coverage.

Exhibit 2–7
SOMERVILLE SAVES Start-up Article



AND WILL YOU BE READY? This is how the Somerville Saves people hope it'll look on sidewalks across the city Monday when the first orange and yellow pick-up trucks roll to gather in especially separated papers, cans and bottles. (R. Schaffel photo)

Somerville Saves is ready to go!

by Barbara Powers

There'll be no marching bands heading up and down the city's seven hills following the pick-up trucks. There'll be no plaque ceremonies at City Hall for the household that puts out the most.

But Somerville householders who go along with the new Somerville Saves program starting up Monday will get salutes from across the country and recognition in Washington. For this is a federally-sponsored program. And, according to the Environmental Protection Agency's (EPA) Penny Hansen, "the rest of the country is anxiously looking to see what will happen here."

It's a citizen program of recycling and the city government will be there to back up the citizen but if he or she doesn't cooperate of his or her own free will, the program, set up as a pilot program to see if a city will work to save itself money, won't work.

The federal government is betting about $122,000 that Somerville can do it.

So what do you have to do.

According to the letter which went out across the city this week signed by Municipal Employees Association president James Rahmeau; Chamber of Commerce Director Frank Stellato and Mayor S. Lester Ralph, you start by separating out from your other trash (do it day by day is easiest) your flat papers in one place and your cans and clear glass (not green or brown or other tints) in another. The latter do not have to be washed.

Then on your regular pick-up day, you put out your ordinary trash in whatever way is your custom. And you put out your piles of papers either tied with twine or put into a paper bag (big grocery bags nicely fit a good-sized stack of newspapers). And your collect your cans and clear glass and put them in a sturdy cardboard box or an old trash can to be returned. Do not use paper bags for the cans and glass and do not use plastic bags for anything.

Material improperly sorted or packaged cannot be collected.

Then put everything to one side of your regular trash and expect one of the city's newly painted Somerville Saves trucks to come along and pick them up.

Why will you be doing it? To save the city (this means you – on taxes or rent) trash disposal money, to recycle materials rather than waste them, and to make money for the city, as the recycling plant will pay the city for your recyclable material.

The city could save up to $25 a ton on this stuff. It produces 44,000 tons of waste per year.

If you have any questions, call the Sanitation Department through 625-6600 ext. 182. If you can volunteer time to help the program planners, call 776-5423.

Reproduced from best available copy.

Exhibit 2–8
SOMERVILLE SAVES Participant Instructions

Recycle Time, Dec. 1

Starting December 1, the Monday after Thanksgiving, the people of Somerville will be asked to separate glass and paper and metal cans from the rest of their trash so that they can be recycled.

They will be asked to do this because Somerville has been chosen for a national demonstration program to see whether people will take the trouble to save their own and their neighbor's money.

For every 10 percent of the population that participates it is estimated that the city can save $33,000.

Somerville's recycling program is unusual in that it depends not upon the complex machinery but upon the actions of each citizen.

The City hopes you'll be a good scout and help out.

Here, then, are the rules:

INSTRUCTIONS FOR RECYCLING

PAPER

1. Save any paper that is flat.
2. This includes newspaper, magazines, telephone books, cardboard, envelopes, letters and paper bags.
3. Stack and tie the bundle with twine or place in a paper bag.

CLEAR GLASS AND METAL CANS

1. Save clear glass only. No brown, green or tinted glass.
2. Save all cans, container lids and other small metal items.
3. Save allminum pie plates, foil and containers.
4. It is not necessary to wash or remove labels.
5. Place outside together in the same container, for example a sturdy box or old trash can.
6. Make sure the recycle container is suited to weather conditions. Do not use a paper bag because it will fall apart when damp.

DO NOT PUT ANY MATERIALS TO BE RECYCLED IN PLASTIC BAGS. MATERIALS IMPROPERLY SORTED OR PACKAGED CANNOT BE COLLECTED.

INSTRUCTIONS FOR COLLECTION

Place tied bundle of flat paper and the recycle container with clear glass and cans off to one side of your regular trash. Two new recycling trucks with specially designed compartments will pick them up on your normal collection day.

ANY QUESTIONS CALL 625-6600

Exhibit 2–9
SOMERVILLE SAVES Article–Program Success

Recycling program hailed in Somerville

The recycling program in Somerville is being hailed as a huge success by those involved in the program.

"The results from the first week of the Somerville Saves recycling program are truly impressive," said Public Works Commissioner Kevin Oliver. "The first week's rate of recovery, in the first in the nation operation is at a level that was not projected to be possible until the end of the first full year of the program."

During the first week, the two recycling trucks, paid for out of the federal grant which is backing the program, collected and delivered to the collection point 130,000 pounds of reuseable material.

The breakdown contained 94,000 pounds of paper and 36,000 pounds of glass and cans and amounts to 26,000 pounds of recyclable materials recovered each day of operation.

John Madama, Information coodinator for the project said that the acceptance of the project by Somerville residents "is amazing" and that, while a 10 percent participation was hoped for in the first months of the program, "some 30 percent or more of the residents are participating in the first week."

Madama wanted to stress that the recyclable materials will be picked up. "The participation by the residents has been so outstanding," Adama said "that we had to request additional trucks from the city to assist the two recycling trucks in making the pickups and we have been running a little behind—but we will get it all."

At current prices, this recyclable materials that were picked up the first week saved the city $1755.

At this rate of recoverv at current prices, the city can expect to save over $91,000 for the first year of operation.

"The rate of recovery is already excellent and I am optimistic that it will improve," Mayor S. Lester Ralph said. "There is also a very strong likelihood that the prices of recyclable materials will go up in the future and will result in an even greater savings for the city."

"We have done in the first week, what we expected and hoped to do at the end of the first year in operation," said Madama "and the residents are really getting behind the program."

He indicated that the savings obtained by the recycling program are the savings of the city in addition to saving the natioal resources.

"Seeing that the program is far exceeding what we expected it to be, some of the pickups may be late," Madama said "but we are doing everything possible and impressing other city trucks to insure that the recycable materials will not remain on the streets."

Exhibit 2–10
SOMERVILLE SAVES Article–Program Success

Somerville cleaning up with US recycling funds

By Nick King
Globe Staff

The workaday world of Somerville sanitation man Charlie Faulhefer has changed.

After hefting garbage and rubbish for 18 years, Charlie doesn't have to touch the stuff anymore.

And it's all thanks to the Federal Government.

Two and a half weeks ago, the recycling of newspapers, clear glass and cans began in Somerville. It is the first of only two recycling experiments in the nation funded by grants from the Federal Environmental Protection Agency (EPA). The other, in Marblehead, will begin Jan. 12.

Charlie Faulhefer, 38, was one of several Somerville dispossalmen who volunteered for the new job of collecting the recyclables.

"It's new, it's exciting and it's cleaner," Charlie said yesterday as he swung stacks of newspapers and barrels of glass and cans from the curb to the new compartmentalized disposal truck purchased with part of the city's $130,000 EPA grant. He leaves the real rubbish, the nonrecyclables, for the regular sanitation men.

With municipalities across the country caught between rising disposal costs and increasing amounts of trash, and between diminishing landfill space and the warnings of environmentalists, the EPA recycling programs in urban blue-collar Somerville and affluent suburban Marblehead could be significant beyond the two disparate communities.

In backing the three-year-long projects, it is the EPA's intention to find out whether low-cost, convenient, community-wide recycling can work.

"We're not trying to come up with 'pie-in-the-sky.' This 'gold in garbage' business has gone too far," says Penny Hansen, project manager for EPA's source separation division in Washington.

"But we're looking for urban and suburban recycling systems that can be reproduced by other communities at a reasonable cost. And when we do we'll publicize the hell out of it," Hansen said.

Dan Madonna sorts out rubbish in Somerville for recycling.
(Phil Preston photo)

Recycling, an offspring of the environmental movement, has had a questionable upbringing in many communities. Most programs recycled only newspaper, which residents had to lug themselves to local transfer stations. The result was low public participation, with the projects often fizzling when the price of newsprint dropped.

Mindful of these pitfalls, Resource Planning Associates, Inc., of Cambridge, consultants to both Somerville and Marblehead, have designed recycling programs in which glass and cans as well as newspapers are picked up at the curbside on a weekly schedule.

Moreover, both communities have signed long-term contracts with Recor, Inc., a Salem-based recycler, which offer the economic stability of minimum floor prices should the paper or glass market take a downward spiral.

The recycling programs are preceded by an intensive public education blitz which includes meetings with community leaders and organizations and recycling education workshops for local teachers at all grade levels.

"Most people think recycling is a great idea but wonder how many people will change their habits to do it," said David Grebow, one of Somerville's three recycling educators. "So we try to make it a community program and go right to the source — the home."

The education technique worked better than expected. During the first week of recycling, some Somerville sidewalks looked the victims of a sanitation strike. As Charlie Faulhefer recalls:

"Nearly everbody put stuff on the sidewalks, much more than we'd expected. And we were green, too. It took us two days just to do one day's work."

Somerville recycled 138,000 pounds of paper, glass and cans the first week and nearly 183,000 pounds the second. For every ton recycled the city saves approximately $14 in disposal costs, plus it is paid approximately $8 a ton for recyclables by Recor. Officials are hoping recycling will save the taxpayers $100,000 of its annual $1.4 million disposal budget.

"It's something the people can see and grab hold of," Charlie Faulhefer was saying. "It's a good feeling when you can say, 'I'm helping out.'"

Reproduced from best available copy.

Exhibit 2–11
SOMERVILLE SAVES Article–Problem Areas

SOMERVILLE JOURNAL

Somerville's saving . . .

but scavengers are hurting

The Somerville Saves recycling program is working. Citizens are saving. "The response is great!"

Things got underway Monday along with the Monday trash pick-ups and "we are amazed at the number of people who had put out their papers, bottles and cans for us," says John Madama, a program planner whose Stepping Stones environmental consultant group got the whole local recycling program going and persuaded the federal government to pick up the tab for its start.

There is one big problem: scavenging.

The successes and the outlook, rather than the problem, was the focus at City Hall Monday when Washington's emissary from the Environmental Protection Agency—Penny Hansen, its solid waste manager—DPW dignitaries, the mayor, Stepping Stones leadership and others made everything official with ceremonies.

But, as soon as the niceties were over, the workers all went back to trying to solve the problem of picking up the "incredible amount" that households responded with and getting "some of the bugs worked out of the system."

The scavenger headache is being tackled head-on with all workers taking down registration numbers of those who are out ahead of the trucks picking up papers for their own profit. There is a city ordinance which prohibits this, saying that all refuse piled for collection is already the property of the city. But administering this and slapping on a fine for the offense is still just being planned.

To those whose collections for Saves were not picked up, administrators say, "The truck will be around, leave it out."

To those who were confused by last week's story saying that nothing for Saves should be put in plastic bags, they say, "But of course you can put your regular rubbish in plastic bags—just not things to be recycled."

Exhibit 2–12
SOMERVILLE SAVES Editorial

When you recycle, Somerville Saves

Federal agencies don't knock on Somerville's door every day with $500,000 to set up programs. But last spring the EPA, Environmental Protection Agency did. And next week every household here will be able to get involved.

Somerville SAVES is a first-in-the-nation curbside recycling program. It has the support of the federal government, the mayor, the Chamber of Commerce, and those whose participation is so crucial to the program's success,the Municipal Employees Association. S. Lester Ralph, Frank Stellato and James Babineau have written to every household saying just that.

Reminders should be going out with your next gas bill, as well, and a public education program in the schools is in full swing.

People from the business community, civic groups, the schools, federal and municipal government and others are doing their part to get Somerville Saves off to a good start. And we would hope every household will complement this enormous and positive effort.

As Jim Babineau, Frank Stellato and Lester Ralph put it, "[illegible] recycle Somerville saves."

Reproduced from best available copy.

Exhibit 2–13
SOMERVILLE SAVES Advertisement

Congratulations!

To all Somerville citizens on your overwhelming response to recycling.

•OVER 1/4 MILLION LBS. RECYCLED IN 2 WEEKS•

Keep up the good work -

Your participation has been so great that we're sorry if we haven't been able to pick up your materials on time. We're improving our operations and we will be back on schedule soon.

You can help us speed up collections by

- placing your recycle materials a couple of feet away from your regular refuse
- making sure recycle materials are not in plastic bags
- not placing clear glass and cans in paper bags (they fall apart when damp)

At the present we cannot recycle corrugated cardboard. We would appreciate it if you put it with your regular refuse. We hope this is only a temporary change.

Many thanks for your cooperation.

..SOMERVILLE DEPARTMENT OF PUBLIC WORKS
ANY QUESTIONS CALL 625-6600 X-182

From six weeks before start-up through the first two-to-three months of the program, new articles appeared at least weekly, due to the pressure exerted on the papers by the program team and to the newspapers' belief that the coverage would be of considerable interest to their subscribers. As the program moves into the post-start-up period and becomes less newsworthy, the papers are less willing to provide prominent and frequent coverage. To combat this declining interest, we will seek periodic (say, bi-weekly or monthly) features, which will include both statistics on the progress of the program and short, general-interest articles about recycling, e.g., on the energy conservation opportunities associated with recycling.

Marblehead

In addition to the two Boston newspapers, RECYCLE PLUS was covered by four local papers:

- Marblehead Messenger (published weekly; circulation 3,500)
- Marblehead Reporter (published weekly; circulation over 8,000)
- Salem Evening News (published daily; circulation 31,000)
- Lynn Daily Evening Item (published daily; circulation over 35,000).

Salem and Lynn border Marblehead, and their two papers have regular Marblehead columns.

As in Somerville, the Marblehead program team made a considerable effort to maintain personal contact with the reporting and editorial staffs of all the papers.

By mid-February 1976, 54 newspaper articles had been published covering all important aspects of the program. A major theme for many of these articles was the importance of reducing the town's collection and disposal costs. In August 1975 the town's incinerator was closed and a new transfer station opened, at a disposal cost to the town of $18.95 per ton. This figure represented a sharp jump in the town's refuse budget, and the Board of Health was most eager to cut costs. The issue was of considerable public interest, and therefore received extensive local news coverage, especially when the Board of Health began to discuss imposing a $50 fine on non-recyclers, as provided for in town by-laws (see Exhibit 2-14).

The program team began, and are maintaining, a bi-monthly column in the Marblehead Reporter. The column focuses on special interest

Recycle or pay $50 fine, residents told

By Irv Dierdorff

Residents not currently recycling willl have to start to do so by this fall or face a $50 fine.

A Board of Health meeting, Tuesday night, to discuss commercial haulers and businesses use of the transfer station was highlighted by Chairman Bruce E. Humphrey's statement that his department plans a crackdown on home-owner recycling when the new compartmentalized vehicles are pressed into service Oct. 6.

Past estimates made by health board officials indicate only 30 to 40 percent of residents participate in recycling. Humphrey notes that the most recent paper pickup was the largest ever - and feels that publicity of how recycling saves transfer station expenses may have had an effect on the public.

When weekly pickup of recyclables start with the use of the new trucks, his men will be able to enforce the town's mandatory recycling bylaw he said. Humphrey explained that it was hard, if not impossible, to enforce the law while the town still picked up recyclables monthly.

"I couldn't ask those guys (employes) to rip open trash bags and sift through garbage to see if there were cans or bottles mixed in," he said.

When the recyclables are picked up weekly, Humphrey claims that his men will be able to tell easily if a household is recycling or not.

Lists will be kept of residents not putting

Continued on Page 7

Continued from Page 1

recyclables out on the curb, he said. A letter will be sent the offender first, and if he still refuses to recycle — the $50 fine will be levied.

"It might take us $200 to take them to court," he said. "But at least we'll get $50 of it back."

Commercial Discussion

Humphrey's comments came after discussions with commercial haulers about new strict mandatory recycling requirements for them. Several haulers and landlords questioned why they should face revocation of their right to dump at the transfer station when residents could get away with not recycling.

Humphrey explained that truckers and businesses were not alone in facing new tight regulations, and that residents would also have to abide by stricter restrictions.

The Board of Health took the opposite of their stand expressed by their chairman only a week previous in regards to disposal of commercial waste. Last week, Humphrey said that all commercial firms would pay $18.95 a ton to dump at the compactor. Now, they would pay nothing, but are subject to strict health board control.

In a separate meeting with Atty. Edward Rockett, representing haulers, R. D. Williams and Robert Pappas, and in a later discussion with a room full of landlords, store owners, carpenters, contractors and restaurant owners, Humphrey explained the strict rules for dumping of commercial trash.

Pappas and Williams were told that they would have to provide the board within two weeks a list of all their customers and the approximate tonnage. The truckers will also have to submit a plan on how they plan to recycle.

Should the truckers be caught taking out-of-town trash or recyclables to the compactor they will immediately and permanently be banned from using the transfer station.

They will be banned for their first offense, he said.

"If we find one envelope, one can from out of town in your dump you will be banned from the transfer station. That's it," he said.

Humphrey said that Marblehead will be the only town in the area not charging for commercial trash.

"We're bending a little, so you guys will have to bend a little. We're not trying to put the screws to anyone," he explained.

Rocket took issue with the first offense ban, calling it "unreasonable."

"I don't understand why my guys should lose their right to dump. Mistakes can happen. You have the remedy in that $50 fine. I don't think the penalty should be any different for my fellows than for homeowners," argued the attorney.

Lawyer's View

Assistant Town Counsel Lawrence J. Markell, who advised the board on the new rules, told Rockett that commercial waste presented a radically "different problem" than residential trash. He stressed that the health board could legally prohibit anyone they wanted to from dumping at the compactor.

Humphrey and Markell explained to truckers and other businesses that the transfer station contract is for 10,000 tons per year. Anything over that and the town pays the $18.95 per ton, they said.

The incinerator was burning an average of 11,300 tons per year, necessitating a 1,300 ton drop to stay within the May Town Meeting appropriation for station operation.

The board expressed hop that the threat of the ban (an the $50 fine for residents would provide motivation t recycle. With a bette recycling percentage, the board hopes to keep within the 10,000 ton contract.

Contractors were told that they must get the person for whom they are doing work to get a permit so that the contractor can dump trash created by construction, etc. The permits mean that contractors will not be charged. Without a permit, should the resident be "too lazy" to get one, Humphrey suggested contractors hike their rates accordingly.

After remarks by several that they would be swamped with paperwork and "red tape" if they have to get a permit for every job, Humphrey relented and agreed that no permit was required for the dumping of three barrels of trash or less.

items, such as senior citizen recycling and recycling for Christmas (see Exhibit 2-15).

The local Marblehead papers also featured two editorials on the program, one of which is shown in Exhibit 2-16.

During the months preceding the commencement of collection, the Marblehead program received more intensive coverage than Somerville's, primarily because of the new transfer station and cost issue.

As in Somerville, Marblehead plans continuing newspaper coverage through features and status reports.

Evaluation

Feedback from residents indicates that newspaper coverage has been a very effective means of communication about the program in both Somerville and Marblehead. The personal rapport established with the newspaper staffs proved to be effective in gaining the maximum coverage from the papers. Early coverage of the Somerville program was not intensive, primarily because the papers considered it too premature to be newsworthy, but in Marblehead there was a newsworthy issue associated with recycling that greatly enhanced early coverage.

The Somerville newspaper coverage would have been more complete if pictures of the trucks and crews had been featured shortly after the start-up date. This would have been a particularly effective way to boost the morale and stature of the sanitation department and the crew members.

In Somerville we discovered that the newspaper is not an effective way to communicate with residents rapidly. There were severe operational problems in Somerville in the early weeks due to heavy snowstorms. Collections were delayed, and people were angered at the inconvenience. News articles expressing the city's regrets at the delay appeared one week or so later, but a more rapid response would have had a much more favorable impact on the citizens. The problem was compounded by the fact that the Somerville Journal is published weekly and has a rigid deadline (three days prior to publication) for all news articles. Further complicating this situation was the requirement to clear the articles with several operating and administrative levels in the city prior to release.

Finally, we feel that more pre-start publicity could have been generated if more attention had been given to the "Somerville Stroller" column in the Boston Herald-American. The program team did not discover that such a local column existed until close to the recycling program starting date.

THE REPORTER Thursday, December 11, 1975 Page 10

Christmas joy does not have to be new - recycle!

by Jo Ann Rowe

At Christmastime, as much as at any other time of year, the lessons of the past can be combined with the ingenuity of the present, to take scraps and possible discards and turn them into thoughtful, creative gifts and decorations. Recycling used to be a way of life, even at the holiday season. In the past, people knew it wasn't necessary to spend large sums on Christmas gifts. With imagination and some effort, we can emulate them to produce a warm and thoughtful group of gifts.

Consider, for instance, one little girl's Christmas last year: ... a doll house, made, (along with new materials) with a base of thick pine shelving too good to toss aside, papered with the bits remaining from the redecorating of her own house, and furnished with some hand made pieces covered with scraps of upholstery fabric (don't completely furnish a first doll house -- it's a many-year-long project, with each piece considered and added as a treat.))

... a doll bed, very old, rescued from the back room of an antique shop. A bit of cleaning up with denatured alcohol, and a rubbing with linseed oil gave it a rustic but lustrous look. Then some ticking remnants were filled with polyfill for a mattress, and a quilt made of remnants from her own room's curtains -- made a perfect resting place for the (new) Christmas doll.

... a doll trunk, rescued from the same back room, painted the color of her room, with her name in bright red.

... total cost: under $20.

... total joy: immeasurable, for parents and child.

Invent your own gift ideas -- scraps of fabric can easily be turned into all manner of patchwork: large and small wreaths, small animals for the tree or for "stuffers", appliques on shirts or aprons. An old table, once cleaned, would add an interesting touch to an empty corner in your mother's (sister's, aunt's) living room. An old frame would look wonderful surrounding a colorful (and usually inexpensive) print by a local artist. Cut out scraps and arrange on a large piece of felt to "map" a child's hometown.

Use your head and the things around you, not just your money, to brighten your holidays. Resolve to have a thoughtful Christmas, not an expensive one.

And after Christmas, make your New Year's Resolution to start participating in Recycle Plus, the expansion of Marblehead's Recycling program. Starting on January 12, all recyclables will be picked up weekly. So watch for the brochure explaining the program and don't throw away your party leftovers - recycle them. It's never been easier.

Exhibit 2–16
RECYCLE–PLUS Editorial

Page 6 - Week of August 27, 1975

The Marblehead Messenger.

Mandatory recycling

Marblehead does have a mandatory recycling law, to its credit, so it should therefore come as no surprise that the chairman of the Board of Health is telling residents that they must start recycling Oct. 6 or face a $50 fine.

Of course, from the standpoint of the sheer volume of work and legal expense and time involved there can be no wholesale crackdown with every resident who fails to recycle being socked with a $50 fine.

But his announcement can be enormously helpful to the important cause of recycling — and preserving our environment — and we're glad he made it.

Just as everyone who exceeds the speed limit, violates the tax laws, or parks overtime is not charged and fined, so would many violators of Marblehead's mandatory recycling law escape prosecution. But a few would be, hopefully, and such selective enforcement would be a tremendous spur to increase the percentage of residents recycling.

What makes Chairman Humphrey's warning realistic and practicable is the arrival next month of two special trucks, purchased under a federal grant, that will make possible weekly collection of all recyclables. Under weekly collections, no one will be faced with a storage or other hardship while letting newspaper, cans or bottles accumulate. Hence, the Humphrey warning is in the ball park. And it can be enforced.

It's nice to think of Marblehead as a leader, or as a place setting a good example for others to follow. We think Mr. Humphrey's plan can be categorized that way.

COMMUNITY LETTER

Letters were sent to every household in Somerville and Marblehead shortly before the start of the programs to announce the starting date, provide instructions on the proper ways to recycle, and encourage the residents to participate (see Exhibit 2-17). The letter is one of the most personal means of communication with individual residents, and, since it was signed by public officials, also serves as a clear indication to the residents of the official commitment of the city to the program.

Somerville

The important considerations in developing and distributing the letter were:

- Form and content
- Timing
- Paper and printing
- Distribution.

Each consideration is discussed in detail below.

Form and Content

The letter was written under the official Somerville letterhead to demonstrate the importance of the program and the commitment of the community leaders. The content of the letter was discussed extensively with the mayor, other city officers, labor officials, and interested members of the community. The body of the letter was designed to be as short and uncomplicated as possible. It was decided not to emphasize the mandatory nature of the program, but to request the cooperation of the citizens and to explain briefly why the program was important (e.g., to save collection and disposal costs, to conserve scarce resources and energy). In addition, the letter included general instructions on the levels of separation, with reference to detailed recycling instructions printed on the reverse side of the sheet.

After considerable discussion, it was decided to have the letter signed by three community leaders (the mayor, the president of the Somerville Municipal Employees Union, and the president of the Somerville Chamber of Commerce) to demonstrate the broad range of community support for the recycling program.

The envelope (see Exhibit 2-18) was designed to reflect the official nature of the letter. The diagonal lettering across the right-hand side was used to attract the attention of the recipients

Exhibit 2–17
SOMERVILLE SAVES Community Letter

CITY OF SOMERVILLE

DEPARTMENT OF PUBLIC WORKS

Dear Somerville Resident:

On Monday, December 1, Somerville will begin a new and better way of refuse collection and disposal called RECYCLING. In order to insure the success of this program, each household is requested to separate their refuse into three parts:

1. Flat paper for recycling.
2. Clear glass and metal cans mixed together for recycling.
3. All remaining refuse for regular disposal.

All material will be picked up each week on your normal collection day beginning the week of December 1.

Somerville now spends over 1.4 million dollars each year on refuse collection and disposal. Recycling will save money for our city by reducing this disposal cost and by providing an income from the sale of the paper, clear glass and metal cans. That means extra dollars for improved city services. Recycling also helps to clean our air, water and land by reducing pollution, and saves limited natural resources and energy.

We usually think of our refuse as waste. Today we must realize that it is a valuable resource for Somerville. This program is a cooperative effort between the Mayor's office, the Somerville Municipal Employees Association, and many community and business organizations. In order to be a success, this program also needs your help. Please follow the instructions on the back of this letter. When you recycle, SOMERVILLE SAVES.

Very truly yours,

James J Babineau

James Babineau
President
Somerville Municipal
Employees Association

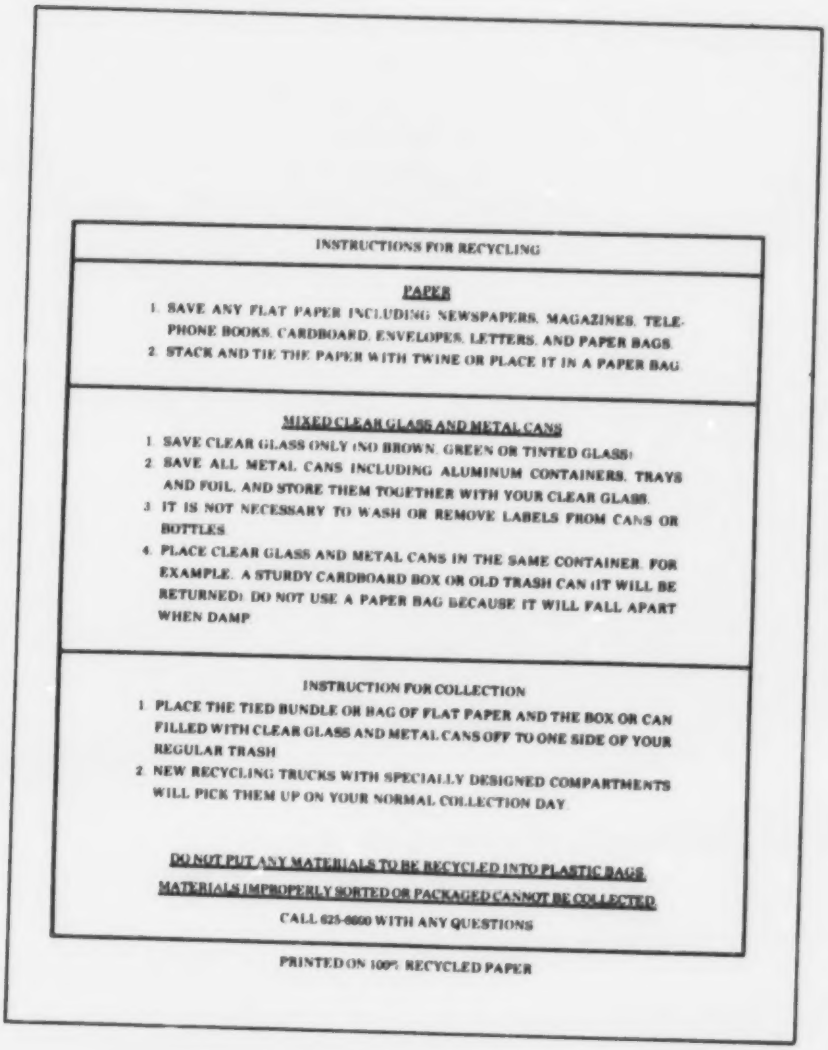
Frank Stellato

Frank Stellato
Director
Chamber of
Commerce

S Lester Ralph

S. Lester Ralph
Mayor

Exhibit 2–17.2
SOMERVILLE SAVES Community Letter



INSTRUCTIONS FOR RECYCLING

PAPER

1. SAVE ANY FLAT PAPER INCLUDING NEWSPAPERS, MAGAZINES, TELEPHONE BOOKS, CARDBOARD, ENVELOPES, LETTERS, AND PAPER BAGS.
2. STACK AND TIE THE PAPER WITH TWINE OR PLACE IT IN A PAPER BAG.

MIXED CLEAR GLASS AND METAL CANS

1. SAVE CLEAR GLASS ONLY (NO BROWN, GREEN OR TINTED GLASS)
2. SAVE ALL METAL CANS INCLUDING ALUMINUM CONTAINERS, TRAYS AND FOIL, AND STORE THEM TOGETHER WITH YOUR CLEAR GLASS.
3. IT IS NOT NECESSARY TO WASH OR REMOVE LABELS FROM CANS OR BOTTLES.
4. PLACE CLEAR GLASS AND METAL CANS IN THE SAME CONTAINER. FOR EXAMPLE, A STURDY CARDBOARD BOX OR OLD TRASH CAN (IT WILL BE RETURNED). DO NOT USE A PAPER BAG BECAUSE IT WILL FALL APART WHEN DAMP.

INSTRUCTION FOR COLLECTION

1. PLACE THE TIED BUNDLE OR BAG OF FLAT PAPER AND THE BOX OR CAN FILLED WITH CLEAR GLASS AND METAL CANS OFF TO ONE SIDE OF YOUR REGULAR TRASH.
2. NEW RECYCLING TRUCKS WITH SPECIALLY DESIGNED COMPARTMENTS WILL PICK THEM UP ON YOUR NORMAL COLLECTION DAY.

DO NOT PUT ANY MATERIALS TO BE RECYCLED INTO PLASTIC BAGS.

MATERIALS IMPROPERLY SORTED OR PACKAGED CANNOT BE COLLECTED.

CALL 625-6600 WITH ANY QUESTIONS

PRINTED ON 100% RECYCLED PAPER

SOMERVILLE SAVES Community Letter Envelope

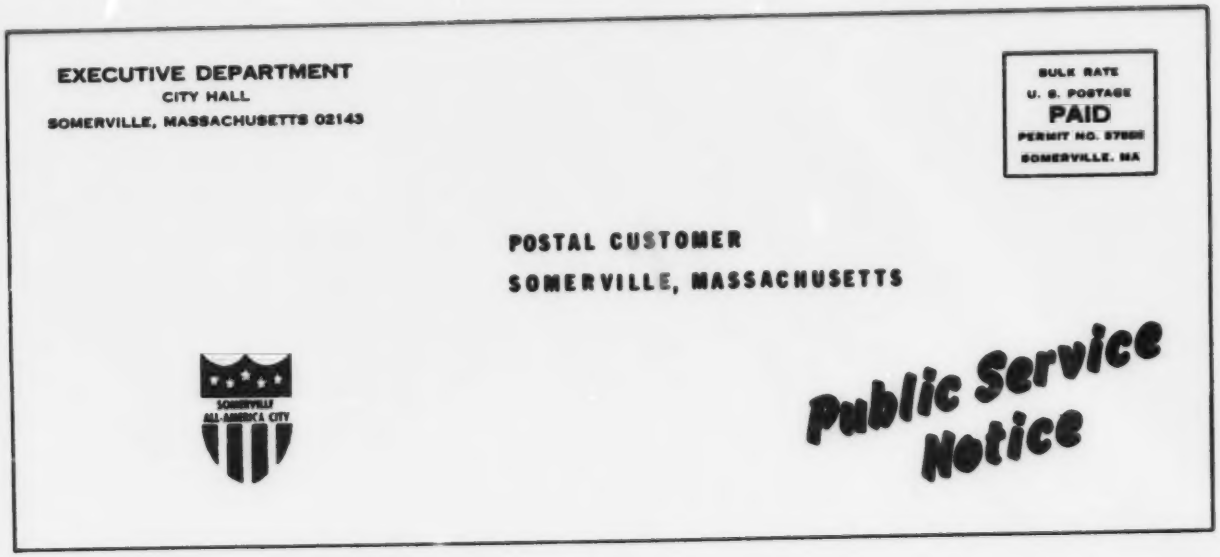


Exhibit 2-18

and encourage them to read the contents. Each letter was addressed "Postal Customer," due to the high costs and time required to use personalized addresses.

Timing

The letter was distributed to all resident households on Friday and Saturday ten days before program start-up. The date was chosen to give people sufficient time to save at least one weeksworth of recyclables close enough to the starting date so that the starting date and the instructions would be easily remembered.

Paper and Printing

The letter was printed on 100-percent recycled paper in keeping with the spirit of the program. We found that 100-percent recycled paper is more expensive and more difficult to obtain from distributors than lower recycle-content papers. The envelopes, also printed on 100-percent recycled paper, were obtained from a local supplier (Mass Envelope) who donated about 15,000 (50 percent) of the envelopes to the program. Volunteers stuffed the envelopes.

Printing was done by a Somerville printing establishment. The body of the letter was typeset instead of typewritten to achieve the best possible appearance. Copies of the first letters off the press were checked for general quality and appearance before all copies were printed. The exact number of copies to be printed (30,000) was determined as a result of discussion with the postal service to determine the number of postal delivery points in the city and the addition of a few percent for later distribution to residents who were missed on the first mailing. Families in large apartment buildings were excluded because, up to this point, they have not been involved in the program.*

Distribution

The letter was distributed by the U.S. Postal Service at a bulk mailing rate of 6.2¢ per letter. Letters were bundled by the program team for each mail route in the city, using route cards provided by the postal service to determine the number of deliveries in each route. The bundled letters were then delivered to the various post offices for distribution to the mail carriers.

Marblehead

The same four considerations discussed above for the Somerville letter applied also to the Marblehead mailing.

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* Refuse from these apartments is collected by non-municipal collectors.

Form and Content

Each resident received the fold-out letter/brochure shown in Exhibit 2-19. This format is similar to previous annual mailings in Marblehead which provided residents with a calendar showing pick-up dates for each of four recyclable materials under the previous program.

The front side of the sheet includes a letter from the Board of Health explaining the benefits and mechanics of the program, emphasizing the ways in which RECYCLE PLUS is an improvement over the earlier recycling program. Following the letter are detailed instructions for recycling, including the placement of materials at the curbside.

The reverse of the sheet is a map of the town showing which areas of the town should recycle on their first mixed-refuse collection day and which should recycle on their second collection day.

Timing

As in Somerville, the mailing was distributed approximately one week prior to the initiation of collections.

Paper and Printing

The mailing of 8,000 was printed on recycled paper (not 100-percent recycled) by a local printing establishment.

Distribution

The Light and Power Department's addressograph was used as the most up-to-date listing of residents. Mailings were distributed by the postal service at the bulk rate of 6.2¢ per letter, the same rate as in Somerville and for previous official, community-wide mailings in Marblehead.

Evaluation

There is no question that the letter was an effective means of communicating with individual residents in both communities. An informal survey conducted in Somerville after the start of the program indicated that about 69 percent of the residents received and read the letter. A similar survey in Marblehead showed that about 80 percent of the citizens received and read the letter.

There are a number of possible reasons why 31 percent of the Somerville residents did not receive, or remember receiving, the letter. First, some may have been missed by the mail carriers. Second, and perhaps more importantly, the design and other characteristics of the envelope may have misled people into believing it to be "junk mail," which was simply discarded and never opened. These characteristics were:

BOARD OF HEALTH
TOWN OF MARBLEHEAD
P. O. Box 98
Marblehead, Mass. 01945

RECYCLING NEWS
from

Recycle Plus

SAVE

DEAR MARBLEHEAD RESIDENT

On Monday, January 12, 1976, Marblehead will begin its new recycling service, Recycle Plus. In addition to your regular refuse collection service, your household will then receive weekly collection of all recyclables. Recycle Plus will also combine this more frequent service with simpler home separation procedures than under our present program. New instructions on how to recycle your paper, glass, and cans and when they will be collected are included on the adjacent panels.

Marblehead now spends about $200,000 each year on refuse disposal. Recycling saves money for our town by reducing this disposal cost and by providing an income from the sale of the paper, glass, and metal cans. An $80,000 grant from the U. S. Environmental Protection Agency has allowed us to purchase two new recycling trucks and to offer the kind of collection service that will enable everyone to participate in this revenue producing program.

We can no longer think of refuse as waste. Today we must realize that it is a valuable resource for Marblehead. Please follow the instructions in this pamphlet, because when you recycle, Marblehead saves.

Sincerely,

Bruce E. Humphrey, Chairman
Donald Moore
Dwight J. Grader

THE BOARD OF HEALTH

Three categories of materials will be picked up during each weekly collection under the new Recycle Plus program: paper, mixed cans and clear glass, and mixed cans and colored glass.

INSTRUCTIONS FOR RECYCLING

PAPER

1. Recycle newspapers, magazines, junk mail, telephone books, envelopes, paper bags, and other flat paper.
2. Please stack and tie the paper with twine or place it in a paper bag.

MIXED CANS AND CLEAR GLASS

1. Save clear glass separately from colored glass.
2. In the same storage container, save some of your metal cans, including aluminum containers, trays, and foil.
3. It is not necessary to wash or flatten cans or to remove labels from cans or bottles.
4. Place the cans and clear glass in a sturdy cardboard box, an old wastepaper basket, or any other durable container.

MIXED CANS AND COLORED GLASS

1. Save colored glass. Brown, green, and other tinted glass can be mixed together.
2. Store the rest of your metal cans and aluminum with this colored glass.
3. Place the cans and colored glass in a container similar to that for clear glass and cans.

INSTRUCTIONS FOR COLLECTION

1. Since most collection days have been changed please refer to the map on the reverse side of this letter to determine your new collection day. It will be one of your two regular refuse collection days.
2. On your recycling day, place the tied bundle or bag of flat paper and the two containers filled with clear or colored glass and cans at the curb separate from your refuse. Labeling your recycling containers will make collection easier.
3. A special compartmentalized truck will pick up your materials and carry them to a reprocessing center in Salem. Your recycling containers will be left behind so that you can reuse them.

IMPORTANT NOTE: Do not put any materials to be recycled into plastic bags. Cans and glass should not be put into paper bags as these fall apart when damp. Materials improperly sorted or packaged cannot be collected.

Please call 631-0212 with any questions.

– PRINTED ON RECYCLED PAPER –

Exhibit 2–19

- The envelope was unsealed, which is characteristic of a variety of advertising and promotional materials
- The envelope was addressed to "Postal Customer," rather than to the individual householder by name
- The distinctive diagonal lettering across the right side of the envelope may have been reminiscent for some people of junk-mail envelopes.

One reason why the Marblehead receipt rate was higher is that the format of the mailing is very similar to previous annual recycling mailings. Residents were familiar with this format and were anticipating a mailing at about the same time. Also, the addressograph listing enabled the town to address each letter individually, which lent a more personal touch.

We feel that the official support indicated by the signatures on the letters is an important motivator in obtaining citizen commitment to the program. This is particularly true in Somerville, where representatives of city government, labor, and the commercial sector all signed the letter.

RADIO

Radio was used in both awareness programs, primarily in the form of public service announcements. While it was not so important as, say, newspapers, it was nevertheless part of the overall strategy for reaching as many people through as many media as often and effectively as possible.

Somerville

The program team contacted the nine major radio stations in the Boston area at an early date to gain their cooperation in providing coverage for the program. The first radio activity was a half-hour discussion show at 7:30 on a Sunday morning several months before the start-up date. This program, "Down to Earth," is sponsored by the Sierra Club and focused on the mechanics of recycling in Somerville, the benefits to the city, and the natural resource conservation potential of recycling. The program moderator was well versed in environmental matters, and the format of the program was a question-and-answer session with members of the program team.

The remaining radio activity consisted of three public service announcements; one at the beginning of the recycling program, one announcing the interruption of recycling operations due to heavy snowfall, and one shortly before the delivery of the recycling calendar (described later in this chapter).

In future, radio coverage will be used primarily for public service announcements. It may also be possible to interest stations in a longer program describing the success of the recycling program at a major milestone point, e.g., after one year of operation.

Marblehead

The program team contacted by letter five radio stations, including the local Marblehead station. This station was also contacted personally.

Radio coverage began in November when the local station interviewed the EPA Project Officer on the program. This 15-minute interview was followed two months later by an interview with the program team in which the implementation of RECYCLE PLUS was discussed. The local station also ran two public service announcements during this two-month period.

Coverage by other stations included a news item and a series of public service announcements. The League of Women Voters conducted a "Consensus" interview with one member of the program team, which was aired in March 1976.

Evaluation

It is not known how effective the radio was in terms of the number of residents reached. Except for the early Sunday morning interview in Somerville, for which listenership must have been rather low, it is felt that the other radio efforts represented a cost-effective means of communicating with the residents in both communities.

CABLE TELEVISION

Cable television was utilized in Somerville, where there is a cable-TV system with from 8,000 to 10,000 subscribing households. Three of the channels are devoted primarily to news and community-interest programs for Somerville and adjacent communities. It was decided to use these local communication links as another means of reaching the residents.

One of the channels features a "message board" that operates continuously for most of the day between programs. This message board features community events of note and rotates from one message to the next, completing a cycle in about 20 minutes. A SOMERVILLE SAVES recycling message has been a regular item since several months prior to start-up of the recycling program and will continue to be used throughout the program.

The same station also featured "Community TV Week" during the week immediately preceding the starting date of the program. The program team gave a 15-minute spot presentation, advertised prior to broadcast in one of the local newspapers, about the importance of recycling to Somerville and to the nation. In future, these 15-minute spots will be used periodically to focus on some specific aspect of the recycling program, e.g., the processing of mixed cans and glass.

Another of the cable channels features a weekly program entitled "Mayor's Report." Ceremonies associated with the beginning of collections were shown on this program approximately 10 days after start-up. This channel also broadcast a major hour-long documentary, produced jointly by the program team and station personnel, covering all aspects of the recycling program from collection through materials processing, and including interviews with the collection personnel, residents, and city officials. This film was broadcast twice; two weeks and six weeks after the beginning of collections. The newspapers provided advance notice of the showing of this film, and notices were also placed in each school classroom.

Evaluation

Cable television has the advantage of being a "local" visual medium. In Somerville nearly one-third of the households subscribe. It is not known how many residents learned of SOMERVILLE SAVES through cable television. However, since the service is paid for whether it is used or not, it is reasonable to assume that is is used regularly and that the message reached many of the subscribers with some measure of positive impact for the program.

COMMERCIAL AND PUBLIC BROADCASTING SERVICE TELEVISION

Boston has three major television stations representing the three national networks and one public broadcasting service station. In view of widespread positive impact of television coverage both on the communities and on the region as a whole, the strategy for major TV coverage has been to persuade each of the network affiliates to feature some aspect of the program at least once as a news item or as a special feature of one of the regular programs.

Somerville

The major commercial stations were initially notified by press release when the grant was awarded to the city. Periodically, during the five-month pre-start period, contacts were made by the program

team, but the stations were not interested in providing any coverage until the commencement of recycling.

The ABC affiliate aired a brief news announcement on the program on the first day of operation. The NBC affiliate covered the ceremonies associated with the distribution of the recycling calendar in a news item.

Marblehead

Letters were sent to each of the four major Boston-area stations. Two of the network affiliates provided major coverage of the program in the first month of operation. The ABC affiliate interviewed a member of the program team and operating personnel as part of its evening news, "Neighborhood Report." This report also featured film coverage of the recyclable collections. The EPA Project Officer and a member of the program team were interviewed for 10 minutes on the NBC affiliate's "Woman 76" program, which is shown daily.

Evaluation

The major stations were not interested in providing coverage until after the programs started. However, the coverage they provided was substantial and most certainly reached a large audience, both in the two communities and in other towns in the area as well. Television is a most effective communications tool, particularly since it requires a relatively small investment of program time and funds.

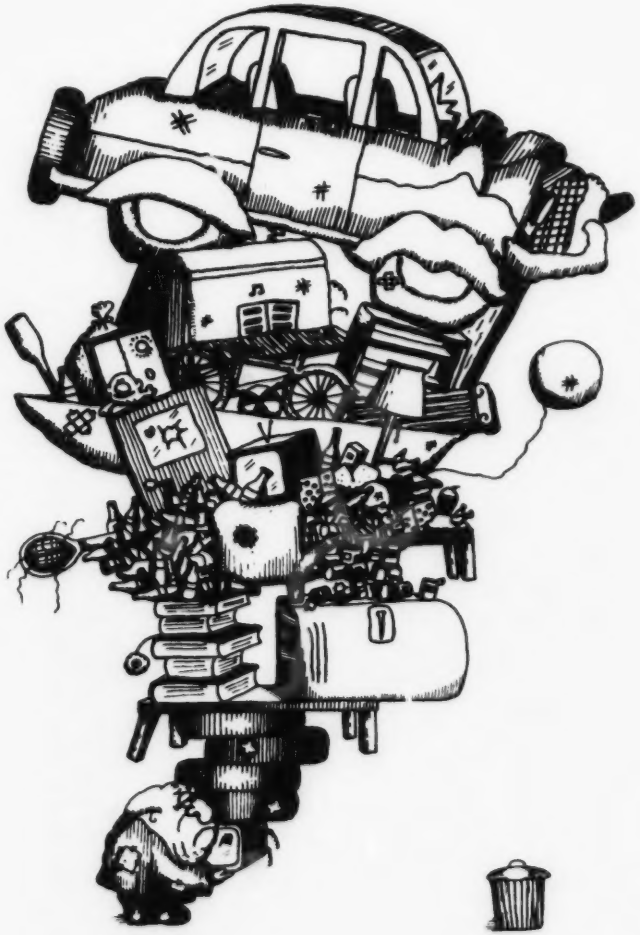
POSTERS

Posters were developed in Somerville and Marblehead, and placed in business establishments and public places to focus the attention of the public on the program through the use of appealing graphic designs and brief, readable messages.

Somerville

The one poster used in Somerville to date (see Exhibit 2-20) was prominently displayed in 150 establishments three days before the start of the program. The 11" x 14" poster is designed to be motivating, instructional, and humorous; its theme is "Recycling only takes a minute." The idea for this poster developed from discussion between the program team and community groups, who expressed concern about the time required to separate recyclables and place them at the curb.

SOMERVILLE SAVES Poster



WHY WASTE?

recycling only takes a minute and does so much good

Save money and energy and resources

SOMERVILLE SAVES

SOMERVILLE RECYCLING PROGRAM
STARTS DECEMBER 1st.

Exhibit 2-20

Although the posters were printed in black and white for economy, the balloon on each was colored red by hand before they were placed on display to heighten the visual impact.

The posters were placed in key locations throughout the city by two people in one day; locations included drugstores, grocery stores, hardware stores, and bakeries.

Two additional poster campaigns, geared to different themes from that described above, were introduced in April and May.

Marblehead

The Marblehead poster (Exhibit 2-21) was placed in 65 commercial establishments throughout the town by the Boy Scouts shortly before the start of the program. The 18" x 23" poster was an eye-catching yellow with black lettering and focused on the cost-saving theme that was used throughout the program.

Evaluation

Posters are effective ways of communicating with the residents for a number of reasons. They can be printed and distributed rapidly (3-4 days) and cheaply, and are perhaps even more efficient than newspapers for rapid communication. The Somerville poster seemed to be effective in responding to residents' concern that recycling takes too much of the homeowner's time.

The process of distributing posters is effective as a means of getting to know the commercial establishment in the community. It was found in both programs that conversations with the proprietors of the various businesses produced useful information and feedback on the problems and successes of the program.

Observations in Somerville indicated that most posters were displayed for about two weeks. Some proprietors kept them up for two months, and a very few are still up at this date. Since other groups seek to place posters in commercial establishments, the more visually appealing and eye-catching the poster, the longer it is apt to remain in the window. In Marblehead, some of the posters are still on display.

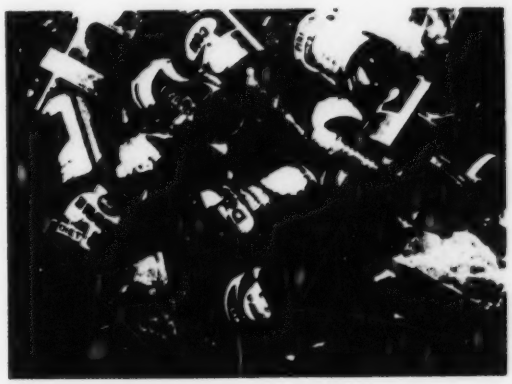
GRAPHIC DISPLAY

A graphic display was developed for the Somerville program, with the objective of providing in one place comprehensive written information, presented in an attractive manner, on all aspects of the

Exhibit 2–21
RECYCLE–PLUS Poster

Recycle PLUS

DON'T THROW MONEY AWAY



Trash disposal costs are now at an all time high.

Recycling saves money and energy

TURN TRASH INTO CA$H!

Weekly pickup of all recyclables starting Jan. 12th

program (operations, benefits) combined with appropriate graphics, such as the SOMERVILLE SAVES logo. This unit, displayed on a 3' x 5' board supported by an easel, was designed for display in businesses, at community events, and in schools. It was displayed for two weeks in a bank shortly after recycling program start-up and for one week at the Elderly Festival two months before the program began. Future plans call for exhibition of the display in all of the city schools on a cyclic schedule.

Evaluation

The size of the graphic display limits its commercial use to establishments such as banks with large, open floor areas. In retrospect, it would have been better for the program in Somerville to have made more extensive use of the display in the public and school libraries.

STICKERS

Stickers, designed to be attached permanently to curbside recycling containers, were distributed to all Somerville residents. The stickers are intended to fulfill the dual purpose of serving as a continuous reminder of the program and of providing for the collection crews a visible means of identifying the location of recyclables along the collection routes, and so improving collection productivity.

In order to conserve the awareness program funds and, at the same time, to involve the commercial sector more directly in the program, it was decided to seek help from local business in developing and distributing the stickers. It was further decided that a local utility company would be ideal as a distributor, since the stickers could be mailed with the periodic utility bills. We made contact with several executives of the Commonwealth Gas Company, including the regional public relations director. Following several discussions of the program and the costs and preliminary designs of the stickers, the company agreed to fund the production and distribution of 17,000 stickers, one to each of their customers in Somerville.

The 3" x 6" sticker (see Exhibit 2-22) was designed to fit in the Commonwealth Gas envelopes and was made of weather-resistant vinyl material for maximum durability. In addition to the logo and program name, the sticker featured the slogan: "Turn Trash Into Cash." A stuffer explaining the necessity of recycling was sent in the billing envelopes with the sticker.

Following the commitment from Commonwealth Gas, the program team contacted Boston Gas to persuade them also to send stickers to their Somerville customers. Boston Gas agreed and mailed 8,000 stickers.

SOMERVILLE SAVES Sticker

Exhibit 2-22

The stickers were distributed over a six-week period that began two weeks after the recycling program starting date. The papers publicized the mailings by the gas companies.

Commonwealth Gas funded an additional 8,000 stickers which have been made available at City Hall and the two city libraries for residents who do not use gas or who, for some other reason, did not receive a sticker through the mail. The newspapers carried notices announcing the availability of these additional stickers.

Evaluation

Besides improving collection operation, the stickers proved to be an effective way of gaining commercial support for the program. They may also have helped to encourage some Somerville citizens to purchase permanent recycling containers.

Although the gas companies were most helpful, it is questionable whether they would have been so enthusiastic if federal support had not been available and the recycling program so much in the public eye. However, utilities are still a good source for this type of program support because they are usually interested in public service and offer a very convenient vehicle for sticker distribution.

The effectiveness of the sticker campaign may have suffered somewhat due to the fact that the stickers were distributed during the period when recycling operations were closed down because of snow.

CALENDAR

The program team in Somerville expended a major effort in developing and distributing a calendar for all Somerville residents (see Exhibit 2-23). The calendar was intended to serve several important functions:

- To be a continuous reminder of the need for and benefits of recycling, hopefully displayed in a prominent place in every household
- To relate the recycling program directly to the Somerville environment
- To provide the residents with an attractive gift from the program which would have a use beyond simply providing information about the program.

Exhibit 2–23

SOMERVILLE SAVES Calendar

Foss Park, Somerville, Circa 1900

SOMERVILLE SAVES Calendar

MAY

A walk in Foss Park in the spring, circa 1900. The problem was never with the environm. , out with the way we used our environment.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						☽ 1
2	3	4	5	6	7	8
9 Mother's Day	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31 Memorial Day					Please recycle this month

Exhibit 2-23.2

As with the letter, there were four main considerations in the development of the calendar: (1) form and content; (2) timing; (3) paper and printing; and (4) distribution.

Form and Content

The calendar was designed to be instructional, informative, visually appealing, and functional. Instructions for recycling were printed on the opening pages, and the statement "Please recycle this month" was printed in the first "day" of each monthly matrix. The information content of the calendar focused on nature and natural recycling and on historical Somerville. The economic benefits of the program to Somerville were deliberately de-emphasized, in order to stress the more subtle natural (environmental) theme of the calendar. The photographs of historical Somerville, which faced several of the monthly calendar leaves, were obtained from the Somerville Historical Society, and were chosen to emphasize the open space, the cleanliness, the uncluttered streets, and the "naturalness" of the past.

Color selection was important, from the point of view both of cost and of visual impact. Assisted by the Graphic Workshop, Inc., of Boston, the program team selected two basic colors, green and orange. Surprinting the two colors to reproduce the photographs resulted in a third color reminiscent of older reproduction processes, and this authentic "antique" look greatly enhanced the visual impact of the photographs.

The calendar matrix provided blank boxes for each date so that the resident could enter reminders and engagements. It was also decided to include an extra bonus month (January 1977).

Timing

The original objective was to distribute the calendar to all residents by mid-December (that is, by or before the time they would be receiving other calendars) to ensure that the recycling calendar would be used in most homes in 1976. The deadline was not met for two reasons: first, there were problems in procuring paper and in scheduling press time; second, because of production delays, we were unable to use the community youth groups who had been enlisted to hand-carry the calendars to each house. When we missed the original December 15 deadline, it was obvious that the volunteers would not be as readily available because of the Christmas and New Year holidays and school vacations. Accordingly, it was decided to distribute the calendars on Saturday, January 17, about six weeks after recycling program start-up.

Paper and Printing

To conserve program funds, commercial support was solicited and received: the Bergstrom Paper Company donated all of the 100-percent recycled paper used in the calendars. The company was most interested in supporting a unique, federally-sponsored recycling program, and they used this as an opportunity to promote a new line of recycled paper. Bergstrom purchased several thousand calendars for their own use for promotional purposes.

Additional support was received from a local printing concern, Nimrod Press, who printed the calendars for 25-50 percent less than their normal rates. The calendar represented by far the largest expense in the awareness program in terms of materials and outside service. The total cost, not including the time of the program team, was about $4,200 for 30,000 calendars. Without commercial assistance, the price could have been in the vicinity of $10,000.

Distribution

It was recognized early in the program that mailing would be prohibitively expensive. As an alternative, we decided to organize distributions by hand through the assistance of community groups. The program team learned that similar distributions had been made in this manner in the past, and an effort was begun to contact groups for assistance in this program.

Approximately 650 individuals took part in the program; 300 Boy Scouts, 300 Girl Scouts, and 50 other volunteers from the Somerville Boys Club, YMCA, and the high school and junior high school ecology clubs. Each group was solicited in a different way. For example, the Boy Scouts were first contacted through the Boy Scouts Regional Office. The regional representative then called the leaders of several of the most active Somerville troops to solicit their cooperation, and these troops then contacted other troops. Three hundred of the city's 1,000 Boy Scouts were thus committed to the program.

Several incentives were developed for the participants, donated in large part by Somerville commercial establishments:

- Free movies. The Somerville Theatre arranged a free movie showing for all participants.

- Ticket raffle. A total of 10 tickets to Boston Bruins and Boston Celtics games were donated by individuals to be raffled to the participants. Two gift certificates to Steve's Ice Cream were also donated for the raffle.

- Free food. McDonalds, Jack-In-The-Box, and Burger King donated free meals for all volunteers.

- Certificates of appreciation. Each participant was given a certificate of appreciation signed by the mayor and the EPA Region I administrator.

- Merit badges. Participation was credited toward public service merit badges for the Boy and Girl Scouts.

On the day when distribution was to begin, a rally was held for the volunteers, of whom about 350 attended. The rally featured the ticket raffle, speeches by the mayor and local educators, and heavy coverage by the press and the the NBC-TV affiliate.

Each volunteer was given 50-60 calendars and a map of a particular section of the city which was his or her responsibility. Shopping bags with handles were donated by Star Market and Johnnie Food Master for use in carrying the calendars. The volunteers were asked to ring each doorbell and to talk with the residents about the recycling program. Calendars were also made available at prominent public locations, e.g., City Hall, public libraries, schools.

Shortly before the calendar was distributed, the need arose to distribute a notice to all residents with instructions for recycling in the event of snowstorms. This notice was inserted inside the front cover of every calendar prior to distribution.

Evaluation

The calendar was without question the most substantial and effective component of the Somerville community awareness program. Very favorable reaction was received from a number of residents on the high quality and appearance of the calendar.

Besides its inherent communication value, the calendar was the integrating force for other community awareness activities. It received very favorable TV and newspaper coverage; it involved several community groups actively through the voluntary distribution system; and eight commercial establishments participated by donating a substantial part of the cost of materials and services.

Despite the delay in the original schedule, the actual delivery date of January 17 proved to be most timely. The four-week program shutdown due to snow ended with the resumption of collection on January 19, and it is felt that the calendar proved to be a real motivator in getting the program moving again. Were it not for this unusual situation, we feel that a mid-December distribution would have been more effective.

C. THE SCHOOLS COMPONENT

The objectives of the school programs in Somerville and Marblehead are:

- To educate students (and future residents) in the benefits of, need for, and approaches to recycling
- To encourage these students to take information home to their parents and thereby impact immediately upon the participation rate.

As the means of reaching these objectives, a curriculum on recycling and solid waste was introduced into all elementary and secondary schools in the community.

SOMERVILLE SCHOOLS PROGRAM

The Somerville school program involved four major phases:

- Commitment
- Curriculum development
- Workshops
- Implementation.

Each of these phases is discussed below.

Commitment

Shortly after the EPA grant was awarded to the city, the program team met with school department officials to obtain their commitment to the recycling program and to a role for schools in the program. Planning sessions were then held with school officials to work out the details of the program. In August 1975 a meeting was held with the Assistant Superintendent for Curriculum and Instruction to begin planning workshops for the teachers. During September and October regular meetings were held with the Superintendent of Elementary Education to plan workshops. During this period, meetings were also held with parochial school principals and high school and junior high school science teachers, and close ties were developed with the chairperson of the science department of the public schools.

School Activities Development

Recycling activity packages, composed of activities booklets and supplemental resource material (e.g., a slide show), were developed for use in the classroom. The activity packages were written for three levels: Grades K-3, Grades 4-6, and Grades 7-12. Sample pages from the K-3 booklet are shown in Exhibit 2-24. The packages were distributed to 11 teachers for review and evaluation, and approximately 800 packages were eventually printed. The teacher's materials contain instructions on how to use the student package in the classroom and provide introductory background information. The booklets are structured in four general topic areas: (1) What is waste? (2) Where does waste come from? (3) What is done with waste and how does it affect the earth? (4) What can we do about waste? The focus of all the lesson plans is to provide activities for the students under the teacher's guidance.*

The resource units were developed to supplement the core materials. Many of the ideas for these packages were derived from the Environmental Action Coalition curriculum materials. Among other things, the resource units included a copy of The Garbage Monster in Somerville (a slide show and script), a recycling skit or play, and recycling posters. These units were intended to be kept in each school's library or resource center.

Workshops

Workshops were conducted for all elementary school teachers, junior high school and high school science teachers, and high school sociology teachers. Twenty-six schools were represented in these workshops, which were conducted between November 19 and December 10, 1975, with 600 participants, representing a total of approximately 17,000 students. The workshops were run by three teams consisting of members of the program team and volunteers from Tufts University Ecology Club. The fifty-minute workshops included an introduction to recycling, a description of the benefits and operation of SOMERVILLE SAVES, and instruction in the use of the classroom materials and resource units. About fifty minutes was alloted for each workshop. The school newsletter (circulation 16,000) carried an article in the December 1975 issue about these workshops.

Implementation

Teachers began implementing the educational programs shortly after the workshops, coinciding roughly with the start of the recycling program.

*These activity packets have been combined into one document which will be published by EPA.

TOPIC IV

C. WASTE HAS A VALUE WHEN IT IS RE-USED

B. RECYCLING TAKES OLD WASTE AND TURNS IT INTO NEW MATERIALS

Activity Nine

Vocabulary - recycle

This activity is very important since it introduces the concept of recycling and reuse as an alternative to dumping and burning. The children should become very familiar with this word and use it frequently. Early in the program we will begin a school paper recycling program so that students can not only learn about recycling, but practice it by recycling in their classroom. Thus it is hoped new habits will develop.

a) Write the word "recycle" on the board or a large sheet of paper. Next to it draw a picture of a bicycle wheel and write this word also. Ask: What does a bicycle wheel do? Point out to the children that both end in the word "cycle".

A bicycle wheel goes around and around - the word recycle means to use over and over again or go around.

b) Point out that when we recycle something, it does not go to the dump or to be burned, but goes back around into something new.

- old paper can become new paper
- old cans and glass become new cans and glass, toys, etc.

c) Have the children imagine what the old could be turned into by recycling.

Ex.: old soup can — part of a new fire engine
pop bottle — a window in school

d) When the school recycling program begins (this date will be announced later) set up a paper recycle box for your classroom. Have the students paint, color or paste pictures on it. Recycle all paper that cannot first be re-used in some way.

e) An experiment can be set up where the children can weigh on a bathroom scale how much they recycle each week. A comparison can be made with other classes to see how much they are recycling.

Activity Ten

a) Using Recycle Notes from the Children's Museum or other resource materials, make up games, toys and crafts from discarded objects and materials.

This book is available from your school recycling resource packet. You can get more copies by writing to them. They cost $1.00 each. They are an excellent resource. This and the following activities illustrate that reusing is a way of recycling.

b) Set up a reuse box in your class. Place in it all materials that can be used again. This can include paper that is only written or drawn on one side. Pictures for colleges, etc. Reuse first if possible then recycle.

c) Set up a Swap box or Swap day when the children can bring in old toys that might be thrown out. They can trade an old toy for another one that is new to them.

I. NATURE RECYCLES

Activity Eleven

This activity completes the cycle by showing that recycling is something nature has been doing all the time.

a) Collect dead leaves in several stages of breakdown. Ask the children if they know what becomes of all the leaves that are on the ground in the fall. Where do they go next summer?

b) Make the connection to them that they become soil by showing and having them feel the layers of leaf and soil that the teacher can bring in.

Future school program activities include: initiation of an in-school recycling program; a poster competition; silk-screening of T-shirts with the SOMERVILLE SAVES logo; and teacher evaluation of the activity packages and resource units.

MARBLEHEAD SCHOOLS PROGRAM

To date, the Marblehead school program has been focused primarily on developing a commitment to the program from the school administration and on initiating a recycling program in the schools. Limited curriculum development work will start at a later date.

Soon after the grant award, the program team met with the superintendent of Schools, his administrative assistant, and the chief of maintenance for the school system. The purpose of this meeting was to inform these officials of the program and to discuss the feasibility of school participation in recycling. The outcome was favorable, and a general commitment to in-school recycling was obtained, including the use of available equipment, e.g., containers, in the schools.

This meeting was followed about a week later by a meeting with the town fire inspector to determine whether there would be any fire safety concerns associated with an in-school recycling program. His reaction to the program was favorable, particularly if collections were made on a regular, frequent schedule.

A meeting was then held with all of the school principals in the town to discuss possible approaches to recycling in the individual schools. The principals' reaction was favorable, and the meeting produced a useful exchange of ideas and approaches.

When town recyclables collections started on January 12, 1976, it was decided not to include school pickups until the Board of Health could observe the new trucks on the municipal pickups and be assured that they had sufficient capacity to collect from all residents. It is hoped that a school pickup program can be implemented soon.

Other school programs included a presentation of Cycles for all junior high school science classes and flyers sent home with each student (about 5,000) on start-up day (see Exhibit 2-25).

EVALUATION

Although we have so far no quantitative measure of the success of the school programs, it is clear that students and teachers in both communities have been communicating with one another about recycling (e.g., some Somerville classes have had homework on this topic) and this initial effect will have been beneficial for both programs. The workshops in Somerville were heavily attended and well received, and

Exhibit 2–25
RECYCLE–PLUS Schools Program Flyer

Recycle Plus

begins in Marblehead on January 12th. All recyclables will be picked up weekly. Please separate into three categories.

1.

paper - stacked or bundled.

2.

Cans mixed with clear glass

3

Cans mixed with colored glass.

There is no need to prepare the recyclables except for bundling paper.

Recycling is Mandatory in Marblehead. It cuts trash disposal costs and brings in revenue.

the school administrative support for recycling was nearly unanimous in both communities. The Somerville teacher workshops held after the recycling program started produced much more active participation than those held prior to start-up. The program team feel that the curriculum package in Somerville would have been more effective and informative if the budget had allowed for more illustrations.

A major part of the school programs in both communities is student activity in recycling. Due to start-up uncertainties and problems, in-school recycling has not been initiated in either community. The school programs will not be fully effective until in-school recycling begins.

D. THE COMMUNITY GROUPS COMPONENT

The objectives of the community-group component of the Somerville and Marblehead programs are:

- To initiate a dialogue between the program team and the residents
- To obtain feedback on the residents' reaction to the program
- To communicate to residents the value of the program and the means by which they would participate.

By establishing personal contact with groups and individuals in the community, it was hoped also to obtain a pool of volunteers for subsequent program activities and a network of interested people who would be able to maintain the program on a continuing basis after the EPA grant funds are expended.

SOMERVILLE COMMUNITY GROUPS PROGRAM

The community groups program involved four major phases:

- Survey
- Contact and commitment
- Materials development
- Group meetings.

Each phase is discussed on the following pages.

Survey

The community component of the Somerville program began shortly after the EPA grant award with identification of all community leaders and community organizations. The list included both organizations with memberships, such as fraternal organizations and church groups, and service organizations without memberships but with active community contacts.

Organizations included: volunteer groups; youth groups (e.g., Boy and Girl Scouts); outreach groups (e.g., Women's Health Center); information centers (e.g., Family Service Association); fraternal organizations (e.g., Kiwanis); church groups; PTAs; and some of the ward civic associations. Over fifty groups were listed in all and were ranked by such factors as community impact, size, frequency of meetings, etc. The survey also covered the socioeconomic characteristics of Somerville and organizing strategies (order of the use of media, contacts with leaders, schools, groups).

Contact and Commitment

Letters were sent to the listed groups informing them of the program and requesting meetings with them to discuss the program in detail. Follow-up phone calls were made to arrange the meetings and to answer any questions about the program operations and objectives.

Meetings with the group leaders produced excitement about the program in almost every case. Leaders were asked to commit themselves to making the program a success and to provide information on the program to their own group members as well as other residents. They were provided with materials prior to general distribution. The program was divided into three tasks; alert, inform, and educate. For example, leaders were alerted to the various program developments ahead of the general community.

Development of Materials

Materials were developed as aids for the program team and for use by community leaders and group members. A community slide show was created incorporating parts of the graphic display and the Cycles slide show, as well as materials taken directly from the Somerville experience. Over 150 community-leader brochures (see Exhibit 2-26) were developed specifically for organization leaders to give them a full understanding of the program from both the Somerville and the national perspectives. The brochure was printed on 100-percent recycled paper and had a striking yellow color with an orange logo on the cover. Many people remarked they had not realized how attractive recycled paper could be. Space was left on the back of the brochure for community leaders to write down ideas, comments, or criticism they received.

SOMERVILLE SAVES Organization Leader Brochure
(outside pages)

THE IMPACT ON OTHER CITIES

It is anticipated that the results of this program will be of considerable benefit to other cities across the country. The success of the program in Somerville can demonstrate that home separation, in a large urban area, is an economically feasible solution to our solid waste disposal problem.

NOTES AND COMMENTS

STEPPINGSTONES, 10 Willow Avenue, Somerville, Mass., 02144 tel. 776-5423
Printed on 100% recycled paper.

Exhibit 2-26

SOMERVILLE SAVES Organization Leader Brochure

SOMERVILLE SAVES

AN INTRODUCTION TO RECYCLING

When a city takes out the garbage, there is a lot more involved than just throwing it away. Last year, we Americans spent over 4.5 billion dollars burning and dumping millions of tons of trash. Somerville alone spent over 1.4 million dollars for collection and disposal, and the cost is increasing each year.

A good part of out trash is valuable. It can be sold, reprocessed, and used again to make new products. This is called RECYCLING. Dumping pollutes our land and water. Incineration pollutes our air. Both waste the natural resources that are necessary to create paper, glass and metal. Why throw away anything that can be used again? RECYCLING makes use and reuse possible. It will extend the life of our resources and bring new revenues to our city.

SOMERVILLE SAVES

The environmental Protection Agency has awarded the city of Somerville a national demonstration grant of $121,588 to enable the Department of Public Works to begin a multi-material, home separation recycling program.

The following are the facts and figures about the SOMERVILLE SAVES Program:

- Somerville produces - 44,000 tons of waste per year
- Old way of disposal costs - $14.75 per ton
  $660,000.00 per year
- New way of recycling saves - $14.75 per ton reduced cost of disposal
  $10.25 per ton revenues from sale of paper, glass, and cans
  TOTAL SAVED $25.00 per ton
- Paper, clear glass, and metal cans = 30% of total weight of all refuse
  13,000 tons per year
- SAVINGS:
  - With 35% public participation = 4,600 tons recycled
    X $25.00 saved per ton
    $115,000 SAVED PER YEAR
  - With each additional 10% participation = $ 33,000 SAVED

SOMERVILLE SAVES INSTRUCTIONS

Two new recycling trucks with specially designed compartments will pick up paper, clear glass and metal cans once a week on the normal collection day. Each household will be requested to put recyclables into the following separations:

PAPER

1. Save any paper that is flat.
2. This includes newspapers, magazines, telephone books, cardboard, envelopes, letters and paper bags.
3. Stack and tie the bundle with twine or place in a paper bag.

CLEAR GLASS AND METAL CANS

1. Save clear glass only. No brown, green or tinted glass.
2. Save all cans, container lids and other small metal items.
3. Save aluminum pie plates, foil and containers.
4. It is not necessary to wash or remove labels.
5. Place outside together in the same container, for example a sturdy box or an old trash can. Do not use paper bags for glass and cans. They fall apart especially when they are wet.

DO NOT PUT ANY MATERIALS TO BE RECYCLED IN PLASTIC BAGS.

INSTRUCTIONS FOR COLLECTION

Place tied bundle or bag of flat paper and the recycle container with clear glass and cans off to one side of the regular trash.

Exhibit 2-26.2

Over 2,500 general community handouts were distributed at meetings and teacher workshops. The black and white handout was less technical than the community leader brochures and introduced the cartoon recyclables and a new variation of the logo (see Exhibit 2-27).

The graphic display was also used at many community meetings along with mock-ups of the cartoon recyclables made from cans, papers, and bottles that could be held up as each recyclable component was discussed.

Group Meetings

Several months before the start-up of the recycling program, attempts were made to schedule presentations before meetings of a number of community groups. This effort was complicated by the low frequency of meetings scheduled by most groups and the relatively low level of enthusiasm before the program was actually in operation or informational materials distributed. Early presentations were made at meetings of the Rotary Club and the Chamber of Commerce, and these sessions provided helpful feedback. Basic concerns that proved useful at later meetings were identified.

Once the program was in operation, community groups were more receptive to the presentations. The groups were offered a choice between a 15-minute and a 30-45 minute presentation with a slide show. Most groups chose the shorter show; however all meetings involved extensive question-and-answer periods. About 20 presentations have been conducteed for various groups since the start-up of the program. Feedback from these meetings has been of great value to the program planners and to the city's operating personnel.

MARBLEHEAD COMMUNITY GROUPS PROGRAM

Community groups have been the source of a substantial amount of activity in the Marblehead program. These groups are of a somewhat different type from the groups in Somerville. For instance, there are numerous garden clubs in Marblehead, while there are none in Somerville. In addition, the Marblehead groups are more active and hold more frequent meetings.

In August 1975 letters were sent to 40 community groups, including church groups, garden clubs, PTAs, and civic groups. Exhibit 2-28 is a sample of the letter sent to Marblehead church groups. The letter describes the program and solicits approval for the program team to speak before meetings of the groups. Each group was offered a choice between a brief 15-minute presentation and a longer, more complete presentation with slide shows and/or panel speakers.

SOMERVILLE SAVES General Organizational Handout
(outside pages)

INSTRUCTIONS FOR RECYCLING

PAPER

1. Save any paper that is flat.
2. This includes newspaper, magazines, telephone books, cardboard envelopes, letters and paper bags.
3. Stack and tie the bundle with twine or place in a paper bag.

CLEAR GLASS AND METAL CANS

1. Save clear glass only. No brown, green or tinted glass.
2. Save all cans, container lids and other small metal items.
3. Save aluminum pie plates, foil and containers.
4. It is not necessary to wash or remove labels.
5. Place outside together in the same container, for example a sturdy box or old trash can.
6. Make sure the recycle container is suited to weather conditions. Do not use a paper bag because it will fall apart when damp.

DO NOT PUT ANY MATERIALS TO BE RECYCLED IN PLASTIC BAGS. MATERIALS IMPROPERLY SORTED OR PACKAGED CANNOT BE COLLECTED.

INSTRUCTION FOR COLLECTION

Place tied bundle of flat paper and the recycle container with clear glass and cans off to one side of your regular trash. Two new recycling trucks with specially designed compartments will pick them up on your normal collection day.

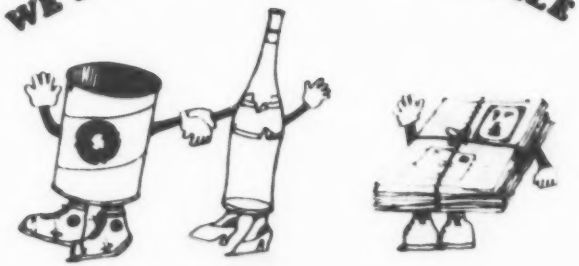
ANY QUESTIONS CALL 625-6600

SOMERVILLE'S RECYCLING PROGRAM

Exhibit 2-27

SOMERVILLE SAVES General Organizational Handout
(inside pages)

WE'RE PROUD OF SOMERVILLE



SOMERVILLE RECYCLES

SOMERVILLE SAVES

On December 1, 1975 Somerville residents started breaking the expensive throw-away habit. Each year we in Somerville throw away 44,000 tons of things we no longer need.

TRASH DISPOSAL IS EXPENSIVE
$600,000 PER YEAR

ADDED TO COLLECTION COSTS
$1 4 MILLION PER YEAR

WHEN WE THROW SOMETHING AWAY - WHERE DOES IT GO?

BURNING — POLLUTES THE AIR
DUMPING — POLLUTES THE LAND AND WATER
BOTH WASTE NATURAL RESOURCES

WE CAN DO SOMETHING BETTER WITH OUR TRASH THAN JUST THROW IT AWAY

WE CAN RECYCLE IT!

RECYCLING TAKES THE OLD AND TURNS IT INTO THE NEW

NEW GLASS — FROM OLD BOTTLES
NEW METAL PRODUCTS — FROM OLD METAL CANS
NEW PAPER PRODUCTS — FROM OLD NEWSPAPERS
LOVE LETTERS LOSING
LOTTERY TICKETS

RECYCLING - A GREAT IDEA

FOR OUR CITY

FOR OUR COUNTRY

RECYCLING SAVES

SAVES — MONEY
SAVES — ENERGY
SAVES — NATURAL RESOURCES
SAVES — BY REDUCING POLLUTION

SOMERVILLE SAVES

WITH

RECYCLING

Money we save from the reduced cost of disposal and the sale of paper glass and cans can mean extra dollars for improved city services

RECYCLE A HABIT - TAKE THE OLD IDEA OF THROW AWAY AND TURN IT INTO THE NEW IDEA OF RECYCLING

RECYCLE this by giving it to a friend

Exhibit 2-27.2

Speaking dates were arranged by telephone during the following month. The response was most enthusiastic, and the program team gave approximately 30 presentations of varying length from September 1975 to January 1976. The presentations included a brief explanatory talk about the recycling program and a question-and-answer session. Although most groups requested the 15-minute presentation, the program team found that the presentations usually ran a minimum of 30 minutes and often longer, including informal post-meeting discussions with individuals.

For the churches, the most effective communication seemed to be through the church literature, such as bulletins, rather than actual speaking engagements, although the program team was invited to speak at a service of the Marblehead Unitarian Universalist Church. Exhibit 2-29 is an example of a church bulletin about the program.

Other community volunteer efforts included Boy Scout assistance with poster distribution. The Scouts have expressed an interest in being of further help, and their services will be used in some of the spring and summer program activities.

EVALUATION

Community programs were successful in both Somerville and Marblehead. In Somerville, while there were fewer actual presentations before groups, there was a major demonstration of community support in the various volunteer efforts, especially with the distribution of the calendars. Commercial support has also been of great importance in Somerville. In Marblehead, volunteers have been used in a more limited way, but the community presentations have offered an invaluable forum for opening lines of communication with a wide range of community groups. The feedback obtained in both communities has been of great assistance in designing and reorienting the program.

It has proved useful in Somerville to have the community meetings phased over a longer period of time than in Marblehead, to provide the opportunity for community contact as problems arise in the initial implementation phase.

The program teams' approach of offering groups a choice between a brief presentation and a more lengthy presentation was a very effective way of gaining access to busy groups who do not react favorably to long lectures on any topic.

In both communities, contact with groups and individual citizens indicated active concern for their environment and their community. They want to participate in the program, but there have been severe frustrations due to operating problems. Citizens are also interested in the ways in which funds from their recycling efforts are going to be used.

Exhibit 2–28
RECYCLE–PLUS Church Group Letter

TOWN OF MARBLEHEAD

OFFICE OF

Board of Health

ABBOT HALL

OFFICE HOURS
MONDAY - FRIDAY
8:00 - 12:00 12:30 - 4:30

Telephone: 631-0212

Raymond A. Reed
Director of Public Health

Bruce E. Humphrey, *Chairman*
Donald W. Moore
Dwight J. Grader

July 31, 1975

Dear Sir:

As you may know, the Town of Marblehead has been awarded a grant by the U.S. Environmental Protection Agency that will enable the town to engage in a new recycling program. As part of that program, weekly curbside collections of all recyclables will be possible. Because of Marblehead's innovative recycling program, the town is considered a model for the rest of the nation. It is important that the townspeople understand the need for increased participation in the program and the benefit of savings that recycling brings to the town.

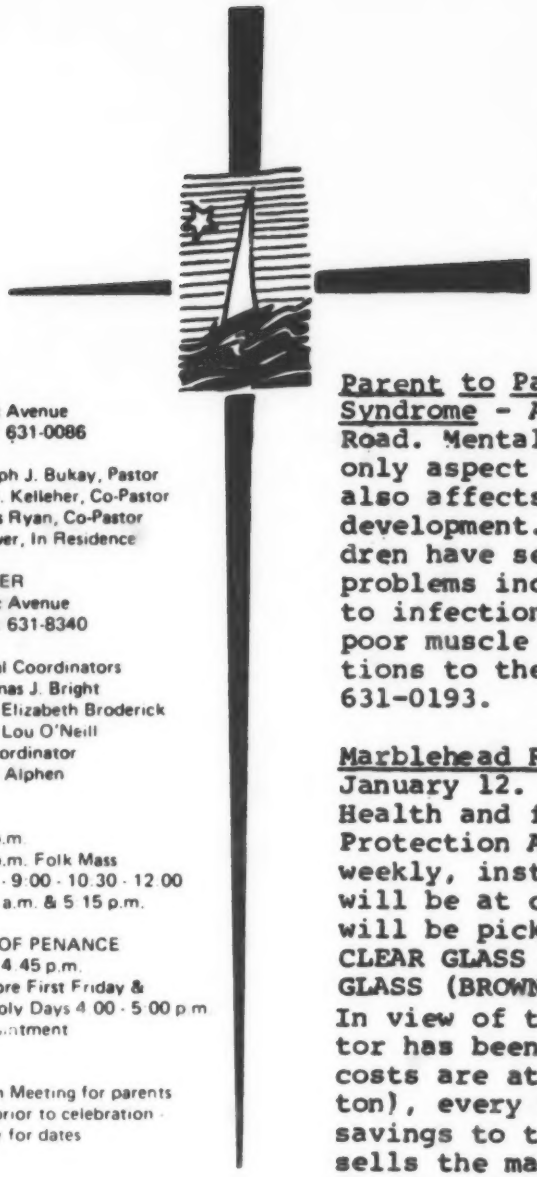
To ensure maximum participation in the program, we would like to come before your group and explain the new recycling program. We can limit our talk (e.g., to approximately 15 minutes) or provide a more complete presentation with slides and/or panel speakers.

Please consider the possibility of placing us on the agenda of one of your general meetings in the fall. To confirm our availability or obtain further information, please contact us at your convenience at 631-4560 (Mrs. Clement) or 631-0163 (Mrs. Rowe).

Sincerely,

Mary Kay Clement
JoAnn Rowe

Exhibit 2–29
RECYCLE–PLUS Church Bulletin



OUR LADY STAR OF THE SEA
MARBLEHEAD MASSACHUSETTS

January 11, 1976

RECTORY:
85 Atlantic Avenue
Telephone: 631-0086

Rev. Msgr. Joseph J. Bukay, Pastor
Rev. Timothy J. Kelleher, Co-Pastor
Rev. G. Thomas Ryan, Co-Pastor
Rev. James Power, In Residence

PARISH CENTER
76 Atlantic Avenue
Telephone: 631-8340

Educational Coordinators
Mr. Thomas J. Bright
Sr. Mary Elizabeth Broderick
Sr. Mary Lou O'Neill
Liturgy Coordinator
James H. Alphen

MASSES:
Sat. 5:00 p.m.
7:00 p.m. Folk Mass
Sun. 7:30 - 9:00 - 10:30 - 12:00
Daily 8:30 a.m. & 5:15 p.m.

SACRAMENT OF PENANCE
Sat. 4:00 - 4:45 p.m.
Thurs. before First Friday &
Eve of Holy Days 4:00 - 5:00 p.m.
Or by appointment

BAPTISM
Preparation Meeting for parents necessary prior to celebration - call rectory for dates

FROM THE PASTOR...

Parent to Parent Mini-Meeting on Down's Syndrome - At Josie Stephens-20 Vassar Road. Mental retardation is not the only aspect of Down's Syndrome. It also affects many areas of physical development. About 40% of the children have serious heart defects. Other problems include greater susceptability to infection, eye and ear problems and poor muscle tone. If you need directions to the meetings, call Josie at 631-0193.

Marblehead Recycling Program - starts January 12. Sponsored by the Board of Health and funded by the Environmental Protection Agency. Pickups will be weekly, instead of monthly, pickup will be at curbside. Three categories will be picked up weekly. PAPER - CLEAR GLASS MIXED WITH CANS - COLORED GLASS (BROWN AND GREEN) MIXED WITH CANS. In view of the fact that the incinerator has been closed and trash disposal costs are at an all time high ($18.95/ton), every ton of trash recycled is a savings to the town. Since the town sells the materials to local re-cycling facilities it also brings revenue into the town. Please refer to the flyer sent to all homes this past week.

E. OTHER COMMUNITY AWARENESS ACTIVITIES

Two types of community awareness activity that do not fall strictly within the three major components of the program were developed: a workshop for the sanitation department recycling crews; and the establishment of a community "hot line." We discuss these activities below.

RECYCLING CREW WORKSHOP

The workshop was conducted only in Somerville. Its purpose was to motivate the sanitation department crews assigned to the recycling program and to instruct them in the necessary procedures. The session was held by the community awareness team one week before program start-up, and included the six crew members and their supervisors. The workshop featured Cycles, the slide show on recycling developed prior to this program by the community awareness team, and a discussion of the value of recycling and the benefits to Somerville. Also included were instruction to the crews on operation of the trucks and collection procedures.

Evaluation

The workshop was considered a success, but would have been even more effective if it had been conducted earlier and had included all sanitation personnel, since there is a need for interaction and cooperation among the recyclables collectors and mixed-refuse collectors.

COMMUNITY "HOT LINE"

In both communities, special telephone lines were established to provide residents with a means for direct communication about the recycling program.

Somerville

A direct telephone line was established for citizens to call the Public Works Department with questions or complaints about the program. The number was widely publicized. In the first three months, approximately 440 calls were received; about 39 percent questions about the program, the remainder complaints about missed collections.

Marblehead

Marblehead also maintains a telephone line to the Board of Health office for complaints and comments about the program. In the first seven weeks, 366 calls were received about RECYCLE-PLUS. Of these, about 70 percent were from citizens who had questions about the program, e.g., home separation procedures. The remaining 30 percent were complaints related to missed collections.

Evaluation

Feedback obtained through the community hot lines in both Somerville and Marblehead has been an invaluable aid in fine-tuning program operations, particularly in the early stages. For example, numerous complaints were received about missed recyclable pickups, and steps were taken promptly to rectify the situation.

F. STATUS OF MATERIALS RECOVERY AND COMMUNITY AWARENESS PROGRAM COSTS

In this section we provide information on the recycled materials recovered to date in Somerville and Marblehead, and on the costs and personnel requirements of the community awareness programs.

STATUS OF MATERIALS RECOVERY

Exhibit 2-30 lists the monthly total of materials collected in two communities. Somerville source-separates and collects paper, cans, and flint (clear) glass; Marblehead collects paper, cans, and flint, brown, and green glass. Through April 1976, Somerville has recovered 924 tons of recyclables, or 8.1 percent of total municipally collected refuse. Since the start of RECYCLE-PLUS, Marblehead has recovered 723 tons of materials, or 30 percent of total municipally collected refuse. In 1975, under Marblehead's previous recycling program, 1,176 tons of recyclables were collected, which amounted to 13 percent of total municipally collected refuse that year.

Municipally collected refuse in Somerville includes residences and small commercial establishments, while in Marblehead it includes residences only.

COMMUNITY AWARENESS PROGRAM COSTS

The two community awareness programs differ substantially in their requirements, primarily because of the different levels of effort required in the two communities. Marblehead is a much smaller community than Somerville and had operated a moderately successful recycling program for several years, while Somerville had never been formally engaged in recycling. Thus, a considerably greater community awareness effort was required for Somerville than for Marblehead.

RECYCLED MATERIALS RECOVERY IN SOMERVILLE AND MARBLEHEAD

	Somerville*				Marblehead**			
Month	Paper (tons)	Cans & Clear Glass (tons)	Total (tons)	Percent of Municipally Collected Refuse	Paper (tons)	Cans & All Glass (tons)	Total (tons)	Percent of Municipally Collected Refuse
1975								
December	132	50	181	10	—	—	—	—
1976								
January	58	41	99	9	82	76	158	33
February	122	74	196	8	83	96	179	32
March	147	74	221	8	93	100	193	28
April	145	82	227	7	94	98	192	27

NOTE: Municipally collected refuse is defined as follows:
Somerville–refuse from residences and small commercial establishments
Marblehead–refuse from residences only

*Recycling program started December 1, 1975. No collections due to weather problems December 22–January 29, 1976.
**Recycling program started January 12, 1976.

Staff requirements are presented as person-hours only, not as actual dollar costs, because of the lack of comparability in the effective wage rates for program staff in the two communities. Actual cost figures are provided for all other non-direct labor expenses, e.g., printing, graphics support.

In Somerville, approximately 2,300 person-hours were expended in the 9-month period from June 1975 through February 1976. We estimate that about 25 percent of this effort was expended in program development activities which would not have been required if the team had had the planning and organizational guidance provided in this report. A group with similar skills and interests attempting a program similar to the Somerville program in another community could expect to expend approximately 1,750 person-hours. Other Somerville expenses total approximately $8,100* to date, of which the calendar accounted for about 55 percent.

In Marblehead, approximately 540 person-hours were expended in the 9-month period. Of this, approximately 10 percent would not have been required if the team had had access to this report. A group attempting a similar program in a comparable community could anticipate expending approximately 500 person-hours. Expenses to date total approximately $850, including $700 for printing and mailing the fold-out community letter.

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* The $1,800 mailing cost of the letter, included in this total, was paid by the city of Somerville.

3. GUIDELINES FOR A COMMUNITY AWARENESS PROGRAM

The previous chapter provides a detailed description of the community awareness programs for the Somerville and Marblehead recycling programs and an evaluation of each program component in both communities. The purpose of this chapter is to synthesize the important findings of Chapter 2 and to develop guidance and suggestions for the conduct of a community awareness program related to recycling. While the specific approaches applied in either Somerville or Marblehead may not be directly relevant to other communities, it is our hope that the general suggestions offered below will serve as guidance for a wide range of communities throughout the United States.

First we present suggestions that apply generally to these kinds of programs and are not keyed to any specific component. We then develop more specific guidance for each component, paralleling the discussion in Chapter 2.

A. GENERAL GUIDELINES

SCHEDULING

If possible, recycling programs that involve homeowner participation or specific public works collections should be planned for start-up at a time of year when weather conditions are favorable. Severe winter weather created operational problems and citizen disaffection in Somerville, thereby increasing the program team's workload and lowering the participation rate.

LOCAL PARTICIPATION

The program team should include local people, preferably residents of the community who have lived in the town long enough to know something about local newspapers, community groups, and commercial establishments. It is not necessary that the entire staff live in the community; specialists, such as graphics experts and media consultants, may not be available locally and would certainly be of value to the team.

CLARIFICATION OF ROLES

A community recycling program involves many active participants, both official and unofficial. At the earliest possible point in the

planning phase, the role and authority of the program team must be clarified and agreed to. For ease of operations, the team should have as much flexibility and authority as possible (e.g., to issue news releases) within limits dictated by community policy. It follows, however, that with greater authority and flexibility, the team must act responsibly in its acquired capacity as an official community representative (e.g., in the quality and tone of news releases).

PLANNING THE PROGRAM

Planning is a must for a successful awareness program, as is evidenced by the complex interrelationships of the elements described in Chapter 2. There are clearly many ways to communicate with the public about recycling, and each program will have its own individual focus, consistent with the specific needs of the community. A public attitude survey, such as that conducted in EPA's Somerville and Marblehead feasibility studies, is a useful way to focus on community needs and attitudes and identify the types and mix of program elements most suitable for the community. In Somerville the calendar, with its themes of historic Somerville, open spaces, and natural resources, offered a subtle linkage to recycling and has been the major program effort to date. In Marblehead, due to the particular circumstances and timing, the economic, cost-saving theme was heavily used. Implementing all of the program components listed in Chapter 2 required a significant expenditure of time and funds. The program teams were paid (albeit at low hourly rates), and they brought to the program considerable interest as well as communications skills. In programs that involve exclusively volunteer efforts, or in which people do not have large amounts of time to spend, it is of the utmost importance in the planning phase to focus the program effort on those activities that will have an important impact in the community and that can be performed well with available resources. Planning of timing is very important. Furthermore, maintaining community contact after the recycling program has started (to sustain interest and for feedback) is essential, and it is important not to expend the entire awareness effort and budget before the program begins. The whole program must be planned carefully.

COMMERCIAL SUPPORT

Commercial support may be vital to the success of a community awareness program, particularly where financial resources are limited. The Somerville program illustrates this point very well. There are many ways in which local commercial establishments can help a program, and the following types of firms should be targeted for special attention by program staff: printers, paper distributors, utility companies, and fast-food chains for active participation and support; and small

commercial establishments for such purposes as poster display. Donations of services and merchandise may be more readily obtained than donations of money.

B. SPECIFIC PROGRAM COMPONENTS

It is important in the planning phase of the program to decide not only on the approach to individual components, but also on overall strategy for coordinating all components to achieve the program objectives. The objective of such strategy should be that each component will reinforce a message or a theme in as many interesting and creative ways as possible. Comments and guidance for specific components are provided below.

MEDIA

All of the media employed in Somerville and Marblehead have been discussed in this report in the interests of completeness. We recognize that many communities will not be able to provide such a comprehensive multimedia program. However more limited programs can still be effective if the media used are carefully selected on the basis of the community's nature and needs. At the same time, we recommend that the following elements should be considered essential ingredients of any community awareness program, whatever its scope:

- Program logotype and title
- Newspapers
- Community letter
- Commercial television
- Posters.

Recycling Program
Logotype and Title

- A logo and program name can be an effective and ongoing reminder of the program, especially if displayed in prominent places, such as recyclable collection vehicles.
- The logo should be developed early in the planning phase.

- Suggestions for the logo and/or name should be solicited from the public as a whole, or from specific community groups, such as schoolchildren.

- A contest with a prize can be an effective way to generate community enthusiasm for the program and as a vehicle for the program to "give" something to the community.

Newspapers

- Newspaper coverage is very effective and relatively inexpensive. It should be a part of every community awareness program.

- At the beginning of the planning phase, contact should be established with the reporting and editorial staffs of all local and regional newspapers.

- Regional newspapers may feature columns with regular news about specific communities. Papers should be checked for such columns.

- The program team should be aware of the types of news stories or features desired by particular papers. Some papers give heavy coverage to community activities; others focus on news items.

- The program team should carefully plan the timing of news releases and feature articles so that there is a realistic chance of the paper's printing them. It is a waste of resources to spend time writing articles that will not be published.

- All newspapers have deadlines for articles. The program team should be aware of and abide by them, particularly where the papers are published infrequently.

- Intensive coverage should be planned for the two-month period preceding and following recycling program start-up.

- Paid advertisements should be considered as program funds allow, both to provide a more flexible communication format and to serve as a reciprocal gesture to the papers in anticipation of their full support of the program.

- Early news stories should feature, among other things, pictures and interviews with the collection force as good "human interest" news and as a morale- and status-booster for the collectors.

- News coverage should be as detailed and informative as possible, and should feature as many photographs of people, equipment, and recyclables as possible.

- Instructions for recycling should appear in local newspapers concurrently with the mailing of instructions to each household.

Community Letter

- The letter is used to communicate personally with each household. It can effectively convey the community's official commitment to the program and can provide detailed instructions for recycling. It is an important component of the community awareness program.

- Careful consideration should be given to the matter of who signs the latter. Whoever signs it is committed to supporting the program, and the broad range of support reflected in the Somerville signatories may be of great importance to the program.

- The letter should be as brief and as simple as possible.

- The envelope should be designed to avoid any resemblance to "junk" mail.

- The letter should be addressed, if possible, to the individual resident by name to assure that as many people as possible get the message.

- The letter should be distributed approximately ten days before program start-up.

- Distribution can be effected through the Postal Service (bulk mail rates) or by a volunteer hand distribution program (e.g., by Boy Scouts). It could be timed to coincide with another mass mailing, such as the calendar mailing, in order to conserve distribution resources. However combined mailings diminish the positive impact of phased mailings.

- Volunteer distribution can be an effective means of saving program funds and involving community groups actively in the program.

- Program funds can be conserved by obtaining commercial support in the form of reduced printing and paper costs.

- A number of the objectives of the letter could be served almost as well by soliciting the cooperation of all local newspapers to print an "open letter" to all citizens from selected community leaders. This would not have the "personal touch" of individual mailings, but it would conserve program resources.

Radio and Cable Television

- While both radio and cable television are effective ways to communicate with residents, they are probably not as important in most communities as other mass media, particularly newspapers and commercial television.

- At the beginning of the planning phase, contacts should be established with station programming personnel.

- If radio and cable television are used, the program team should attempt to arrange coverage during audience peak periods, especially if time and budget resources must be expended in preparing for the broadcast.

- Public service announcements and messages are very easy to prepare, and represent a cost-effective way to communicate via these media. Radio stations are required by FCC regulations to commit a certain amount of time to public service announcements.

- Intensive coverage is not likely until after the collections have started and some "hard" results are in.

Commercial Television

- While it is difficult to involve major TV coverage until the program has started and there is something to film and results to report, this coverage should be sought whenever possible. It is certain that major station news programs are viewed by a large number of residents, both in the community and in the surrounding region.

- Contacts should be made shortly before recycling program start-up and contacts maintained with station programming staff.

- When a major station decides to cover an event, such as the recycling program start-up, the news department will send sufficient staff (reporters, technical crews) to do all of the work. However, the program team should be on hand to answer questions and facilitate special arrangements (e.g., a backdrop for a truck photograph) and community liaison.

Posters

- Posters are an effective way to communicate rapidly and directly, if necessary, with many residents.

- Posters should feature one short, catchy phrase or slogan with minimal additional copy, and should be visually exciting and interesting. They should be as large as possible, consistent with the display capabilities of the stores. Posters are usually read quickly or in passing and need to be posted for as long as possible in order to reach the largest number of people.

- Posters should focus on a single aspect of the program, either the general theme (cost savings to Marblehead) or perhaps a response to a specific resident concern ("Recycling only takes a minute").

- Posters should be considered if there is an urgent message about the program that has to be communicated quickly to residents, e.g., weather-related delays.

- The poster distribution process should be used by the program team as an opportunity to get to know the owners and staff of commercial establishments in the community and to open up another channel for feedback on the program.

- Posters should be displayed shortly (1 week) before the recycling program start-up.

Graphic Displays

- The graphic display is a useful way to communicate, in an appealing way, a substantial amount of information (benefits, operations, results) in one centralized and easily accessible location.

- A plan should be developed to keep the graphic unit continuously on display.

- Banks and libraries and special events, such as fairs, are ideal locations for the display.

- The display should effectively combine words and visual elements to communicate a message that can be absorbed by a reader in a relatively short time.

- An interesting (and more expensive) refinement is an audio component. The display would then consist solely of captioned photographs: the audio component would transmit a message (say, via headphone) that would complement and expand on the visual component. A further refinement would be a rear projector slide or film loop show coupled with the headphones or loudspeakers.

Stickers

- Stickers provide an active link to the program for all residents. In addition, identification of permanent recycling containers improves collection productivity by simplifying container identification.

- Stickers should be designed to be as large and as durable as possible, and to be visible to the collectors as they approach each house.

- Instructions should be provided, preferably on the sticker itself, to ensure that it is used on a recycling container and not, for example, as an automobile bumper sticker.

- Stickers should be distributed shortly before or just after the recycling program start-up.

- Stickers offer an interesting way to involve commercial establishments, such as utilities, in the program, by subsidizing free mailing of the stickers. Program funds can be conserved if commercial establishments will finance the production and/or mailing of the stickers.

- Utility companies are particularly responsive in this regard because of their public service orientation, their local presence, and their frequent mailings to large numbers of residents.

- Utilities serving a multi-community area may resist funding one community's program, for fear of establishing a precedent to support other communities.

- Where more than one utility serves the community, a commitment from one provides considerable leverage to gain support from the other(s).

Calendar

- The calendar is something useful and valuable that residents will appreciate and use throughout the year. It is thus very effective in both the initial communication impact and also in serving the important function of sustaining community awareness.

- There are many possible themes for a calendar. The theme selected should relate both to some major aspect of the recycling program and to the individual community, as the environmental theme of the recycling program and the historical photographs were linked in the Somerville calendar.

- Printing and paper costs for a large number of calendars could severely tax program resources. Commercial contributions of money, supplies, or services could play a vital role here.

- A possible means of conserving funds and, at the same time, incorporating other program objectives would be to delegate the design and printing of the calendar to the schools. The design could be selected from competitive entries from all grades (or selected grades), and printing carried out as a major project of the local or regional vocational school.

- The calendar should include instructions on recycling program procedures and reminders to participants, as well as information about broader issues of economics, conservation, and recycling.

- The calendar should be distributed on or before December 15.

- Local volunteer groups should be used for distribution.

- Commercial establishments should be persuaded to provide incentives for the volunteers, e.g., free hamburgers, movie passes.

SCHOOLS

- The school component of the community awareness program is important for two reasons:
  - The students can influence their families to participate
  - The students will develop an environmental awareness which will hopefully have an important long-term effect on the community.
- School administration officials should be contacted at the outset of program planning to explain the program to them and gain their commitment.
- Existing curricula should be reviewed with teaching and administrative staff to determine the best fit for a recycling education component.
- Classroom materials should be developed similar to those for the Somerville program.
- Meetings should be held with school principals and teachers (elementary, secondary science, social sciences) to explain the program and their potential role in it, and to receive feedback on specific educational requirements.
- Classroom participation in recycling or waste-related activities is important in maintaining student interest. In-school recycling should be started and should include arrangements for pickup by public works personnel and other operating requirements.
- Students can be used effectively, if with some limitations, for distribution, e.g., the distribution of program start-up notices. This can be a very rapid means of communicating important program notices.

COMMUNITY GROUPS

- The involvement of community groups is vital to total, long-term community commitment to the program, as evidenced in Somerville and Marblehead. A wide variety of groups, including youth groups (e.g., Boy Scouts, Girl Scouts), senior citizens groups, commercial establishments, and garden clubs, to name only a few, can make meaningful contributions to the program.

- Community organizations should be surveyed and their leaders contacted to advise them of the program, gain their support, and schedule follow-up meetings.

- Information packages should be prepared for the community leaders, describing all important aspects of the program.

- Meetings should be held with community leaders, and where possible, presentations given to, and feedback received from, members of the groups.

- In attempting to speak before community groups, the program team should offer a choice of brief or full presentations, so that groups with busy meeting schedules will be reached.

- Community groups are an excellent source of volunteers and can help to distribute the program workload. Youth groups are particularly useful in this regard.

OTHER ACTIVITIES

- Training should be offered to the collection force (both recycling and mixed-refuse crews). It is vital that they understand their importance to the program, and be thoroughly familiar with the background, objectives, benefits, and operations of the program.

- A means should be established for direct citizen feedback on the program, such as a telephone "hot line" to record and respond to complaints and suggestions.

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